WEST TENNESSEE

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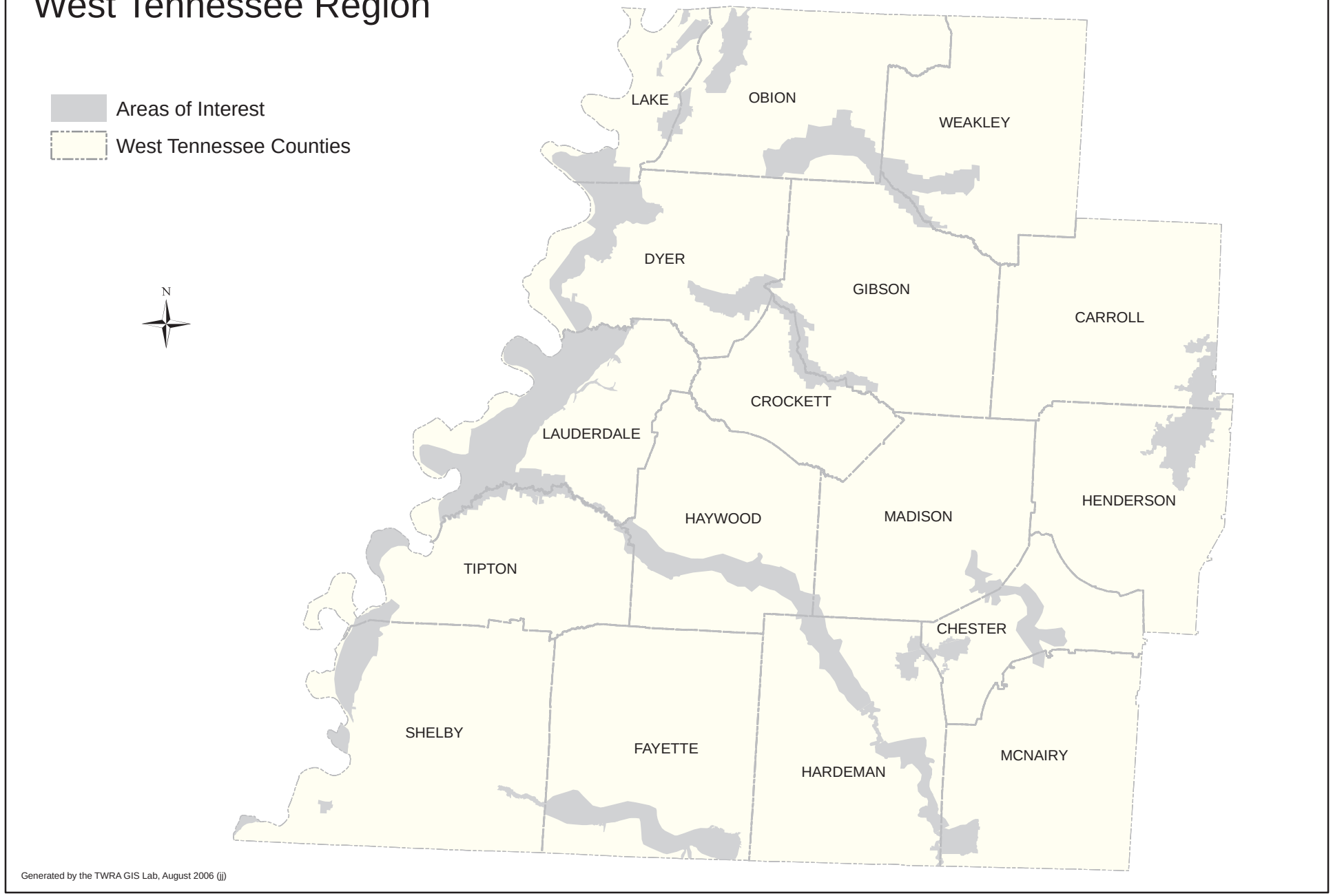
West Tennessee Region



IMPORTANT AQUATIC HABITAT AREAS OF WEST TENNESSEE

Location - Two tributaries of the Mississippi River have been selected as important habitat areas. The Hatchie River flows through McNairy, Hardeman, Haywood, Tipton, and Lauderdale counties. The Wolf River flows through Fayette and Shelby counties. Important lands include both river channel and adjacent floodplain.

Description - These rivers are large tributaries to the Mississippi River. Compared to other rivers in the region they are in decent condition, as they still have some unaltered sections of channel. However both rivers suffer from channelization and are threatened by erosion in the watershed.

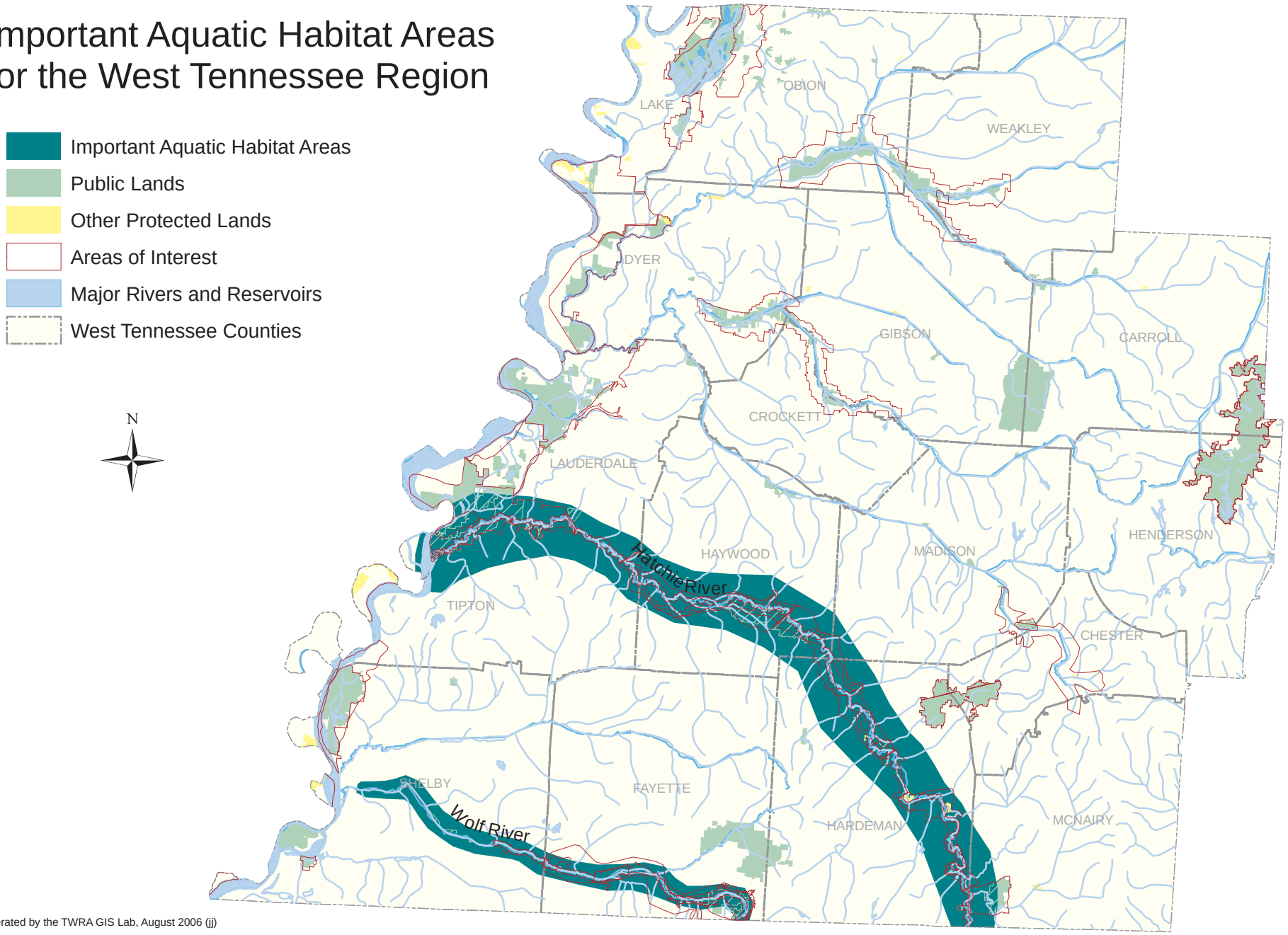
Significance - Rivers and floodplain forests that function naturally, such as the Hatchie and Wolf river systems, are imperiled ecosystems in the lower Mississippi valley. In fact, the naturally meandering stretches of the Hatchie River make it the longest free-flowing tributary of the lower Mississippi River. The Hatchie and Wolf rivers interconnect bottomland hardwood forests, canebrakes, swamps, sloughs, and oxbow lakes. The natural flood processes that drive these ecosystems are intact, sustaining these rivers and their wetland habitats that support rich aquatic diversity. Unaltered tributaries of the Mississippi River provide important spawning habitat and high-flow refuge areas for large river fishes. Additionally, natural flows are crucial to the transport (from spawning areas to the river) of juvenile fishes after hatching and routine floods allow these same fish access to the rich backwater lakes that are important to their first year growth and survival. Aquatic habitats in the Hatchie and Wolf river ecosystems are home to more than 135 species of fish and mussels and the Hatchie River probably contains more species of catfishes (11) than any other river in North America. In addition to the complex aquatic ecosystems, these rivers systems have the most extensive floodplain forests in Tennessee that are frequented by over 250 bird species.

Excessive sedimentation, contaminants, altered flow patterns as well as habitat fragmentation are all threatening the viability of Tennessee's Mississippi River tributaries. Several groups have recognized the uniqueness of these systems and are diligently working to restore and protect these streams. TNC has named the Hatchie River as one of 75, "Last Great Places" worldwide most deserving of protection during the next decade and the Wolf River Conservancy was formed with the mission "to conserve and enhance the Wolf as a natural resource for public education and low impact recreation."

Land Management Strategies - Protection of streams and riparian zones can be achieved by direct acquisition and working with landowners to implement conservation programs designed to reduce erosion of soils.

Partners - TNC, TPG, USFWS, NRCS, TDA, Tennessee Landowner Incentive Program, Tennessee Stream Mitigation Program, Wolf River Conservancy.

Important Aquatic Habitat Areas for the West Tennessee Region



Generated by the TWRA GIS Lab, August 2006 (jj)

ARCHAELOGICAL SITES IN WEST TENNESSEE

Location - Carroll, Chester, Crockett, Dyer, Fayette, Gibson, Hardeman, Haywood, Henderson, Lake, Lauderdale, Madison, McNairy, Obion, Shelby, Tipton, and Weakley Counties.

Description - These counties occupy the Coastal Plain and Mississippi River Valley physiographic regions. The Coastal Plain is generally defined as an area of relatively low elevation and relief. The eastern portion of the Coastal Plain (West Tennessee Uplands) has upland elevations of about 500 feet AMSL, whereas the western portion (West Tennessee Plain) is less hilly with terrain that gently slopes toward the Mississippi River. Low bluffs adjacent to the Mississippi River floodplain (elevation around 100 feet AMSL) mark the western margin of the Coastal Plain. The Mississippi River Valley comprises the Mississippi River floodplain. This physiographic region can measure up to 14 miles wide, and includes Reelfoot Lake along with a variety of oxbow lakes, meander scars, back swamps, and natural levees.

Prehistoric Sites - Prehistoric archaeological sites recorded within these two physiographic regions are classified into four major time periods: (1) Paleo-Indian, 10,000 B.C. to 8000 B.C.; (2) Archaic, 8000 B.C. to 1500 B.C.; (3) Woodland 1500 B.C. to A.D. 800; and (4) Mississippian, A.D. 900 to A.D. 1500. The Tennessee Division of Archaeology's statewide site file lists 1,661 occurrences of prehistoric sites in the THCP region. These range in size and complexity from relatively small Paleo-Indian and Archaic camps to substantial Mississippian mound centers.

Many of the prehistoric sites included in the following table represent significant cultural resources that are in danger of destruction due to a variety of man-made (agriculture, construction) and natural (erosion) forces. The THCP will provide an important means to acquire some of these non-renewable resources before they are lost forever. An excellent example is the Denmark Mounds site (40MD85) in Madison County. Currently in private ownership, this Mississippian period site consists of three prehistoric mounds and associated habitation areas on a bluff overlooking Big Black Creek. Much of the site remains intact, although some vandalism of the mounds has occurred over the past decade. Denmark Mounds represents just one of two Mississippian mound centers documented within the Coastal Plain physiographic region. This site is critical to understanding the social and political dynamics of Mississippian populations in west Tennessee.

Historic-Period Sites - With few exceptions, historic-period archaeological sites in this part of Tennessee date from after the Chickasaw land cessions of 1818. The statewide site file maintained by the Tennessee Division of Archaeology identifies 1,004 historic-period sites in west Tennessee. These sites are varied as to the kinds of past activity that occurred at each location, and some have more than one "component," meaning there are two or more kinds of historic-period activity represented within the boundaries established for that site. Some sites have standing historic-period buildings, but the existence of a building is incidental to the area being defined as an archaeological site. The largest number of recorded historic-period sites in the region fall under the general

category “domestic sites,” a group made up of locations where nineteenth or early-twentieth-century homes, farmsteads, and plantations once existed. Other broad categories include large and small-scale industrial sites, military sites, and special site categories that occur mostly in urban areas. A study of Civil War military sites in West Tennessee recorded 81 examples in the West Tennessee Region. This is a site category that is considered especially endangered and in need of preservation efforts. The historic-period sties listed on the following table include a number of these Civil War military sites, as well as sites from other categories. The non-military sites were chosen based on a variety of preservation considerations. In general they are sites that represent some past activity that is of special interest, but where there are few if any examples that can be considered protected.

Land Protection Needs – 1,822 acres at an estimated cost of $7,988,000.

Potential Partners – The Archaeological Conservancy, Tennessee Council for Professional Archaeology, Tennessee Wars Commission

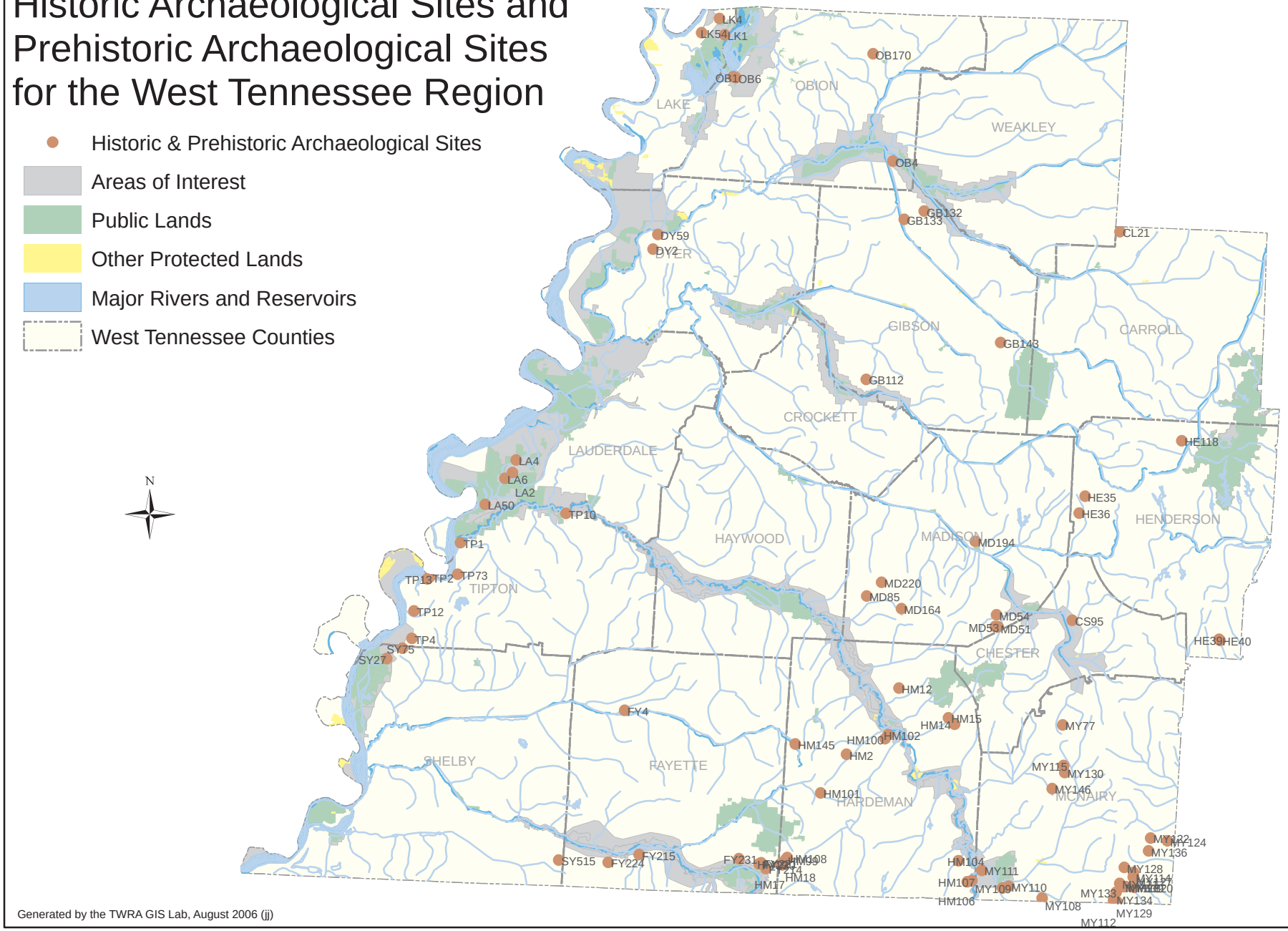
West Tennessee – Archaeological Sites

County	Site Number	Estimated Acreage	Name
Carroll	40CL21	5	McKenzie Pottery
Chester	40CS95	20	Bray Mounds (Prehistoric)
Crockett	- none -		
Dyer	DY2	10	Lenox Gin (Prehistoric)
Dyer	DY59	5	(Unnamed Prehistoric)
Fayette	40FY4	10	(Unnamed Prehistoric)
Fayette	40FY214	10	LaGrange Defenses (CW)
Fayette	40FY215	10	Grissum Creek Defenses (CW)
Fayette	40FY221	15	LaGrange Fort (CW)
Fayette	40FY224	15	Lafayette Defenses (CW)
Fayette	40FY230	5	Hancock Hall (CW)
Fayette	40FY231	15	Pinecrest Earthwork (CW)
Gibson	40GB112	25	Gibson Wells Hotel Resort
Gibson	40GB132	20	Davy Crockett Homestead (1st)
Gibson	40GB133	15	Davy Crockett Homestead (2nd)
Gibson	40GB143	5	Flippin Creek (Prehistoric)
Hardeman	40HM2	20	(Unnamed Prehistoric)
Hardeman	40HM12	7	Keller Pottery
Hardeman	40HM14	10	E. Price Pottery No. 1
Hardeman	40HM15	10	E. Price Pottery No. 2
Hardeman	40HM17	5	B. Ussery Pottery
Hardeman	40HM18	5	S. Smyth Pottery
Hardeman	40HM19	5	W. T. Follis Pottery
Hardeman	40HM99	10	Fort McDowell (CW)
Hardeman	40HM100	5	Bolivar Defenses (CW)
Hardeman	40HM101	5	Middleburg Blockhouse (CW)
Hardeman	40HM102	5	Bolivar Defenses (CW)
Hardeman	40HM104	10	Fort Flad (CW)
Hardeman	40HM106	300	Davis Bridge (CW)
Hardeman	40HM107	40	Confederate Camp (CW)
Hardeman	40HM108	10	Grand Junction Defenses (CW)
Hardeman	40HM145	5	Trail of Tears Segment
Henderson	40HE35	7	Craven-Fesmire Pottery
Henderson	40HE36	10	M. Craven Pottery

County	Site Number	Estimated Acreage	Name
Henderson	40HE39	10	M. Mooney Pottery No. 1
Henderson	40HE40	10	M. Mooney Pottery No. 2
Henderson	40HE118	60	Parker's Crossroads (CW)
Lake	40LK1	15	Haynes (Prehistoric)
Lake	40LK4	20	Otto Sharpe (Prehistoric)
Lake	40LK54	30	Island No. 10 Defenses (CW)
Lauderdale	40LA2	10	Porter (Prehistoric)
Lauderdale	40LA4	20	Jones Bayou (Prehistoric)
Lauderdale	40LA6	10	(Unnamed Prehistoric)
Lauderdale	40LA50	100	Fort Pillow (CW)
McNairy	40MY77	10	N. J. Culberson Pottery
McNairy	40MY108	25	Post Chewalla (CW)
McNairy	40MY109	8	Youngs Bridge (CW)
McNairy	40MY110	10	Butler's Chapel (CW)
McNairy	40MY111	10	Wray's Bluff (CW)
McNairy	40MY112	10	Advance on Corinth (CW)
McNairy	40MY114	8	Advance on Corinth (CW)
McNairy	40MY115	5	Bethel Defenses (CW)
McNairy	40MY118	10	Advance on Corinth (CW)
McNairy	40MY119	10	Advance on Corinth (CW)
McNairy	40MY120	8	Advance on Corinth (CW)
McNairy	40MY121	10	Advance on Corinth (CW)
McNairy	40MY122	10	Advance on Corinth (CW)
McNairy	40MY124	140	Fallen Timbers (CW)
McNairy	40MY127	70	Advance on Corinth (CW)
McNairy	40MY128	90	Advance on Corinth (CW)
McNairy	40MY129	8	Advance on Corinth (CW)
McNairy	40MY130	8	Bethel Defenses (CW)
McNairy	40MY133	10	Bethel Defenses (CW)
McNairy	40MY134	5	Advance on Corinth (CW)
McNairy	40MY136	10	Advance on Corinth (CW)
McNairy	40MY146	20	Unnamed Earthwork (CW)
Madison	40MD51	10	Davis Pottery
Madison	40MD53	10	C. Monroe Pottery
Madison	40MD54	5	H. Reevely Pottery
Madison	40MD85	20	Denmark Mounds (Prehistoric
Madison	40MD164	15	Britton Land (CW)
Madison	40MD194	5	Jackson Pottery
Madison	40MD220	5	Denmark Church (CW)

County	Site Number	Estimated Acreage	Name
Obion	400B1	15	Grassy Island Mounds (Prehistoric)
Obion	400B4	5	(Unnamed Prehistoric)
Obion	400B6	10	(Unnamed Prehistoric)
Obion	400B170	10	Camp Brown (CW)
Shelby	40SY27	5	(Unnamed Prehistoric)
Shelby	40SY75	10	Rast (Prehistoric)
Shelby	40SY515	8	Collierville Defenses (CW)
Tipton	40TP1	10	Hatchie (Prehistoric)
Tipton	40TP2	10	Richardson Landing (Prehistoric)
Tipton	40TP4	10	(Unnamed Prehistoric)
Tipton	40TP10	10	Bishop (Prehistoric)
Tipton	40TP12	10	Wilder (Prehistoric)
Tipton	40TP13	10	(Unnamed Prehistoric)
Tipton	40TP73	200	Fort Wright (CW)
Weakley	- none -		

Historic Archaeological Sites and Prehistoric Archaeological Sites for the West Tennessee Region



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STREAM FISHSING ACCESS - WEST TENNESSEE

Locations - Fourteen access points are shown on the following map. These areas were chosen to complement existing access areas and improve the value of recreational fisheries. All areas are located adjacent to the named river. The exact location is not critical; it is possible that another parcel located within one mile could be substituted for the indicated location.

Description - Access points would be relatively small parcels (3-10 acres) located in the floodplain, preferably near existing roads. Areas adjacent to existing roads and bridge right-of-ways are typically covered with early-succession vegetation. Some locations may be in agricultural use.

Recreational Significance - Access is currently limiting the recreational value of these rivers. Fishing is a popular sport for Tennesseans and tourists. Opening additional access areas would allow anglers to fish for a variety of fish including bass, catfish, crappie, and bream. Some areas would be suitable for duck hunting. All areas could also be used for wildlife viewing.

Canoeist and kayakers would use these areas. Many of the requested access areas are positioned such that one could safely travel from one point to the next within a day. A well-developed series of access points along these rivers would attract more visitors to the area. Ultimately, attracting private canoe shuttle services would further improve the recreational value of the river. For example, there are already some shuttle services on the Wolf River.

Strategy - TWRA would establish a small gravel parking area, and provide a narrow gravel or concrete ramp to the river for boats. TWRA would develop access areas in a manner that would minimize the footprint on the land and maximize the amount of riparian vegetation.

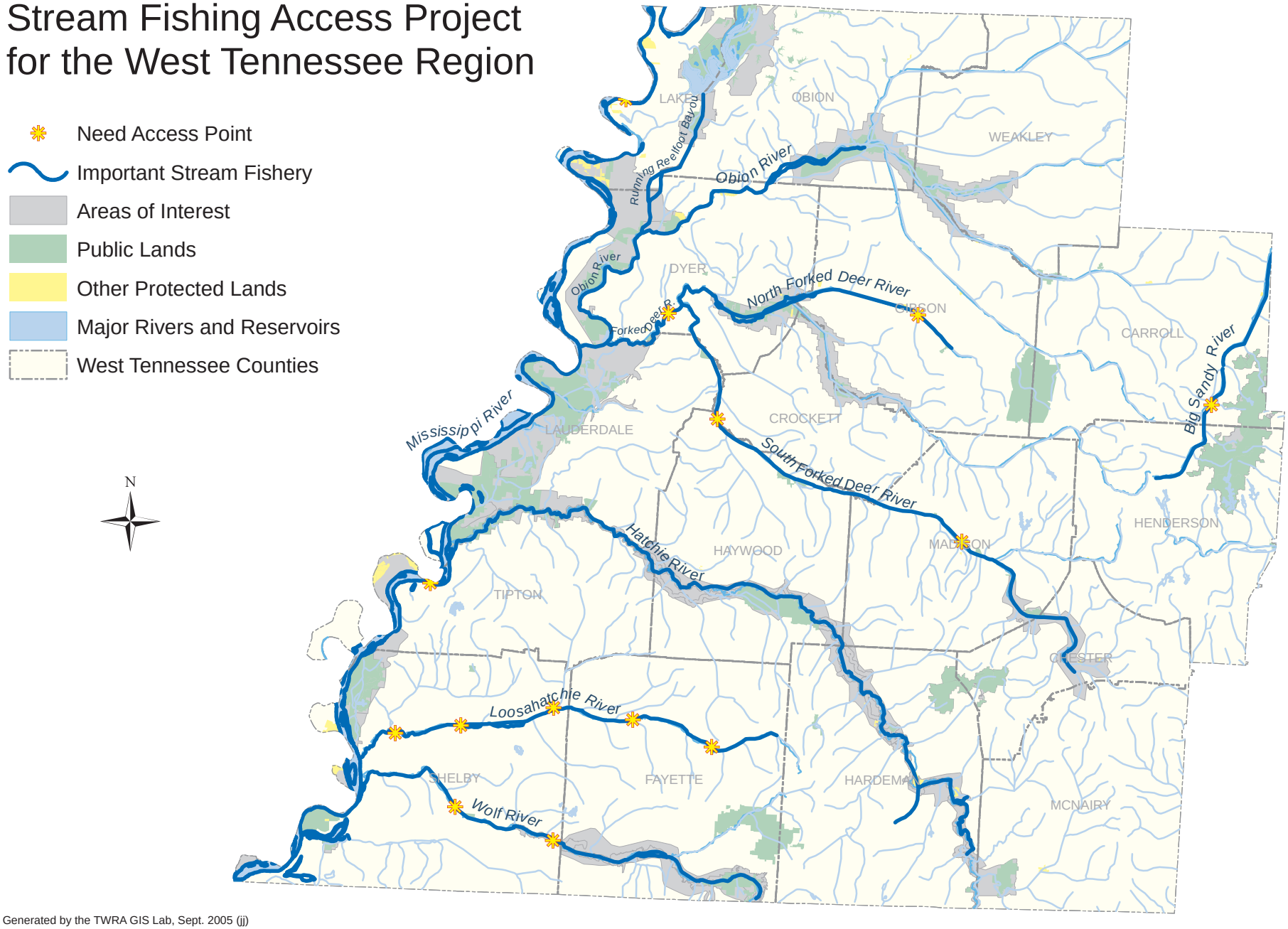
Land Protection Needs – 43 acres at an estimated cost of $94,600.

Potential Partners - TPGF, TWRF, local tourism boards, DU, and local watershed organizations.

Fishing Access Needed in West Tennessee Region.

River	County of needed access	Number of boat access needed	Total Acres	Cost/ Acre	Land Cost	10% Survey & Closing Fees	Total Cost
Mississippi River	Tipton/Lake	2	10	2,000	20,000	2,000	22,000
Forked Deer River	Dyer	1	3	2,000	6,000	600	6,600
North Fork Forked Deer River	Gibson	1	3	2,000	6,000	600	6,600
South Fork Forked Deer River	Haywood/Crockett/Madison	2	6	2,000	12,000	1,200	13,200
Loosahatchie River	Shelby/Fayette	5	15	2,000	30,000	3,000	33,000
Wolf River	Shelby	2	6	2,000	12,000	1,200	13,200
TOTAL		**13**	**43**		**$86,000**	**$8,600**	**$94,600**

Stream Fishing Access Project for the West Tennessee Region



Generated by the TWRA GIS Lab, Sept. 2005 (jj)

MISSISSIPPI VALLEY LAKE FISHING ACCESS

Location - The 23 lakes are located along the Mississippi River Corridor. See following table and maps for locations.

Description - These lakes vary in size from 3 to 1,084 acres in area. Some were originally formed by oxbows, and others have dams that maintain the pool. The property to be purchased would ideally include at least a 200-foot buffer around each lake.

Significance - These lakes provide habitat for a variety of resident aquatic and terrestrial wildlife. Many would support migrating waterfowl.

Public access to multiple lakes along the Mississippi Corridor would provide multiple-use opportunities to Tennesseans and tourist visiting the area. Depending on the size of the lake, recreational opportunities could include fishing, hunting, wildlife viewing, and paddling. These lakes would make great side trips off of the Great River Birding Trail. Travelers on the Mississippi Bike trail could use some of these as destinations or rest areas along their route.

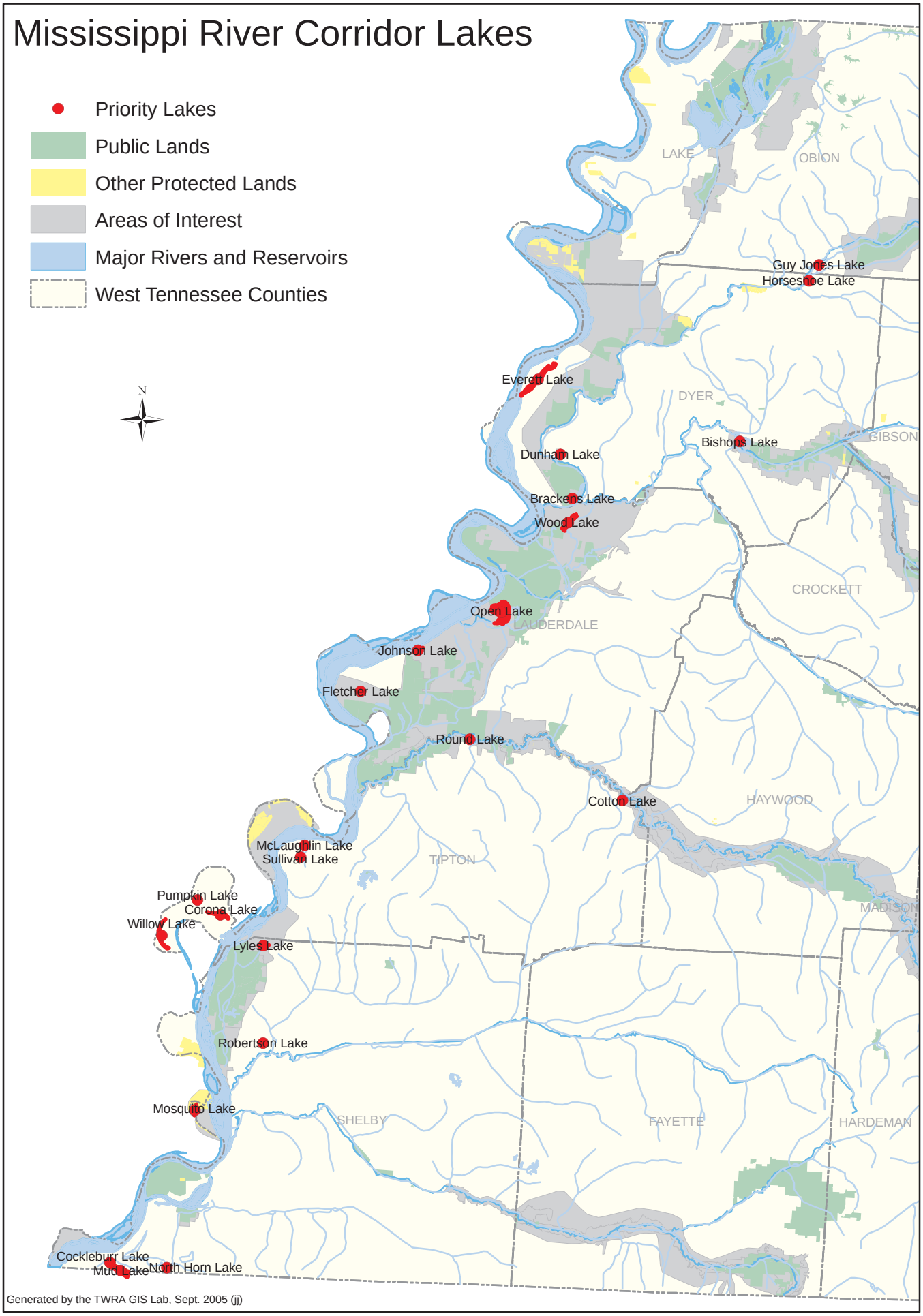
Land Protection Needs – 3,992 acres at an estimated cost of $13,333,892

Potential Partners - DU, local tourism boards, Tennessee Ornithological Society, TPGF.

Private Lakes Recommended for Purchase									
LAKE NAME	**COUNTY**	**Latitude**	**Longitude**	**LOCALE**	**Estimated Lake Acreage**	**200 Foot Lake Buffer**	**Estimated Total Acreage**	**Estimated Cost/Acre**	**Estimated Total Cost**
Bishops Lake	Dyer	36.00555	-89.35583	Dyersburg	7.42	20.52	27.94	4,000	$111,768
Brackens Lake	Dyer	35.9311	-89.59694	Moss Island	9.43	19.09	28.51	$2,500	$71,287
Dunham Lake	Dyer	35.9825	-89.61666	N. of Moss Island	8.52	19.04	27.56	$2,500	$68,910
Everett Lake	Dyer	36.07083	-89.65472	S. of I-155	532.18	208.34	740.52	$2,500	$1,851,308
Horseshoe Lake	Dyer	36.19916	-89.26277	N. of Newbern	3.01	10.54	13.56	$2,500	$33,890
Fletcher Lake	Lauderdale	35.69277	-89.89444	Golddust	23.40	30.75	54.15	$2,500	$135,363
Johnson Lake	Lauderdale	35.7436	-89.8125	Ashport	44.82	47.48	92.30	$2,500	$230,757
Open Lake	Lauderdale	35.79499	-89.69555	Chickasaw National Wildlife Refuge	1084.29	166.45	1250.74	$3,000	$3,752,218
Wood Lake	Lauderdale	35.90222	-89.6025	Hales Point	122.88	136.79	259.66	$3,000	$778,990
Guy Jones Lake	Obion	36.21777	-89.24916	Gooch WMA	4.84	24.85	29.70	$2,500	$74,246
Cockleburr Lake	Shelby	35.00416	-90.22277	Memphis	24.69	24.55	49.24	$3,000	$147,708
Lyles Lake	Shelby	35.33861	-90.02333	Meeman Shelby SF	57.11	51.59	108.70	$3,000	$326,112
Mosquito Lake	Shelby	35.1886	-90.11055	Loosahatchie Bar	28.07	50.29	78.36	$3,500	$274,243

Private Lakes Recommended for Purchase (continued)									
LAKE NAME	**COUNTY**	**Latitude**	**Longitude**	**LOCALE**	**Estimated Lake Acreage**	**200 Foot Lake Buffer**	**Estimated Total Acreage**	**Estimated Cost/Acre**	**Estimated Total Cost**
Mud Lake	Shelby	34.99583	-90.20722	Memphis	359.68	100.04	459.72	$4,000	$1,838,864
North Horn Lake	Shelby	35.00305	-90.1425	Memphis	31.91	26.95	58.86	$4,000	$235,428
Robertson Lake	Shelby	35.27138	-90.01527	Loosahatchie R.	9.82	20.71	30.53	$3,500	$106,872
Corona Lake	Tipton	35.42138	-90.08444	Mississippi R.	140.47	99.16	239.63	$3,500	$838,700
Cotton Lake	Tipton	35.57527	-89.51083	Hatchie River	9.38	33.22	42.60	$2,000	$85,198
McLaughlin Lake	Tipton	35.50777	-89.96694	Mississippi River	5.71	16.41	22.12	$3,500	$77,409
Pumpkin Lake	Tipton	35.4375	-90.11888	Mississippi River	14.00	19.55	33.55	$3,500	$117,408
Round Lake	Tipton	35.64	-89.73305	S. Fort Pillow Prison	6.32	20.46	26.77	$2,500	$66,930
Sullivan Lake	Tipton	35.4936	-89.97222	Island 35	3.05	12.17	15.22	$3,500	$53,273
Willow Lake	Tipton	35.39361	-90.17166	Brandywine Chute	155.59	146.41	302.00	$3,500	$1,057,008
Totals					**2686.58**	**1305.36**	**3991.94**		**$12,333,892**

Mississippi River Corridor Lakes



BIG HILL POND STATE PARK AND DAVIS BRIDGE

Location – (N35.0425,W88.7478) Big Hill Pond State Park is located in McNairy County about 18 miles south of Selmer on Hwy 57 about 10 miles from the intersection of Hwy 45. The Davis Bridge civil war battle site is located just west of the state park.

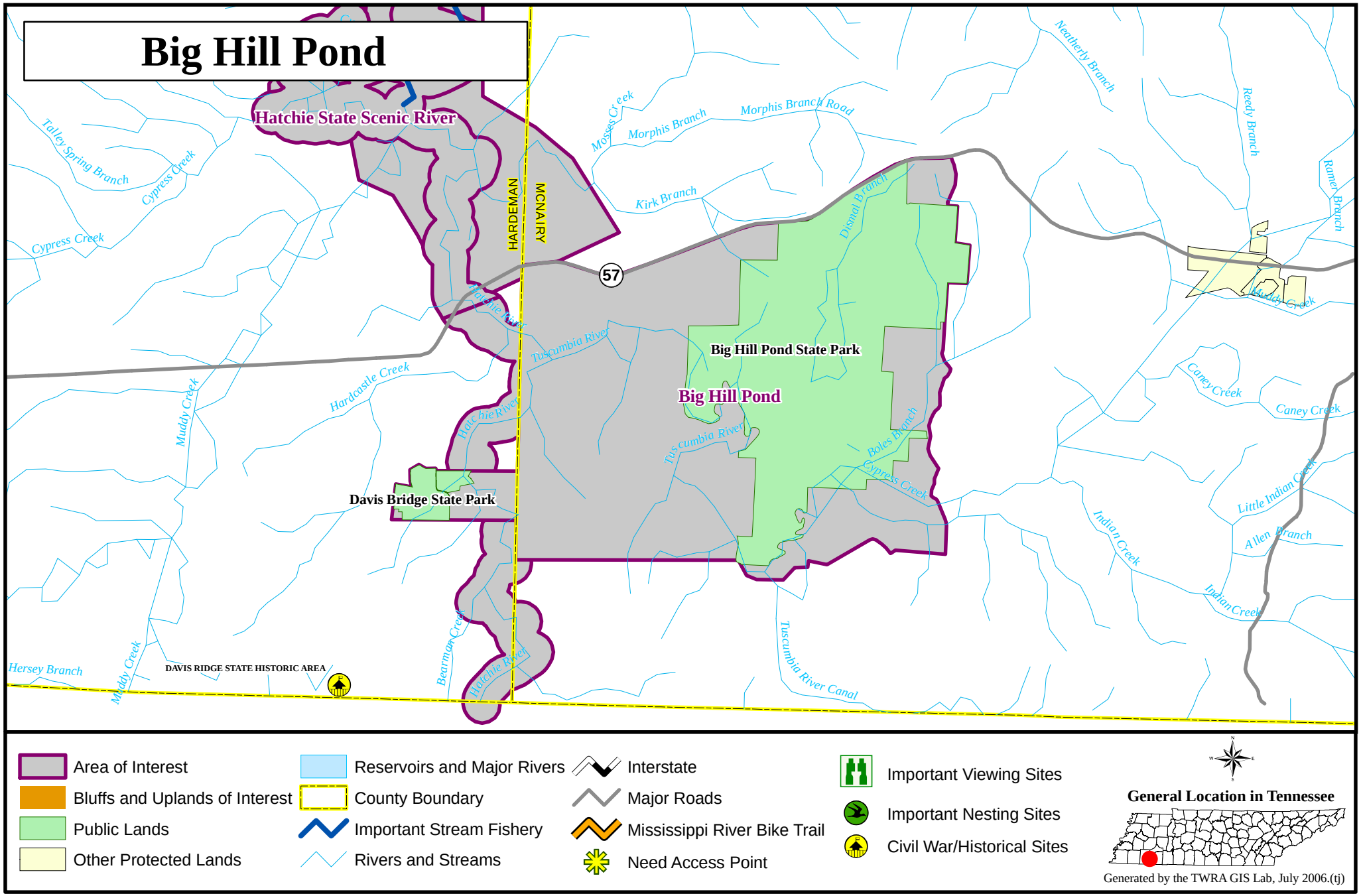
Description - Big Hill Pond State Park lies in the southwestern part of McNairy County and encompasses approximately 5,000 acres of magnificent timberland and hardwood bottom land. Cypress Creek and Tuscumbia River border the property. Several oxbow lakes and sloughs add to the waterway. The floodplain adjacent to both the Tuscumbia River and Cypress Creek contains small oxbow lakes and swamp areas which are desirable habitat for waterfowl, wildlife and fishing.

Significance - Big Hill Pond State Park's role within the state park system is to provide low impact recreational opportunities which mesh with the concepts of historic, cultural and environmental education and preservation of the environment. Big Hill Pond works well with Pickwick Landing State Park and Chickasaw State Park to offer a full spectrum of recreational experiences. The Davis Bridge Civil War Battlefield, located just two miles to the west of the park, was the site of a battle for a bridge across the Hatchie River and is maintained by personnel from Big Hill Pond. There are at least three other significant archaeological sites within this project area. Big Hill Pond State Park provides the community with several day use oriented facilities such as hiking, fishing and picnicking.

Strategy - The strategy for future acquisitions at Big Hill Pond State Park and Davis Bridge are to acquire properties surrounding the park for access or access control and those that further the wildlife, aesthetics, historic and recreation missions of the State Park System.

Land Protection Needs - Approximately 3,159 acres at an estimated cost of $10,000,000.

Potential Partners - TCF, LWCF, Civil War Preservation Trust, Tennessee Wars Commission and Davis Bridge Memorial Foundation.


Big Hill Pond
Hatchie State Scenic River
Big Hill Pond State Park
Big Hill Pond
Davis Bridge State Park
DAVIS RIDGE STATE HISTORIC AREA
HARDEMAN
MCNAIRY
57
Talley Spring Branch
Cypress Creek
Cypress Creek
Mosses Creek
Morphis Branch
Morphis Branch Road
Kirk Branch
Neatherly Branch
Reedy Branch
Ramer Branch
Dismal Branch
Muddy Creek
Hardcastle Creek
Muddy Creek
Hatchie River
Tuscumbia River
Tuscumbia River
Boles Branch
Cypress Creek
Caney Creek
Caney Creek
Little Indian Creek
Allen Branch
Indian Creek
Indian Creek
Tuscumbia River Canal
Bearman Creek
Hatchie River
Hersey Branch
Muddy Creek
Area of Interest
Bluffs and Uplands of Interest
Public Lands
Other Protected Lands
Reservoirs and Major Rivers
County Boundary
Important Stream Fishery
Rivers and Streams
Interstate
Major Roads
Mississippi River Bike Trail
Need Access Point
Important Viewing Sites
Important Nesting Sites
Civil War/Historical Sites
General Location in Tennessee
Generated by the TWRA GIS Lab, July 2006.(tj)

CHICKASAW STATE FOREST & STATE PARK

Location – (N35.3728, W88.8210) Chickasaw State Forest is located in Chester and Hardeman Counties on the Coastal Plain in West Tennessee near Henderson.

Description - Chickasaw State Forest - (13,104 acres)

The Forest originated with the Resettlement Administration Program in 1935. The entire project area was deeded to the State of Tennessee in 1955 and the TDF assumed responsibility for the portion that is now a State Forest. Approximately 8,190 acres of the Forest are in hardwood types, about 3,826 acres are in southern yellow pines, and the remainder is in mixed pine and hardwood types. The Forest is dominated by stands of mature sawtimber. About 35% of the stands are upland hardwoods in excess of 80 years old.

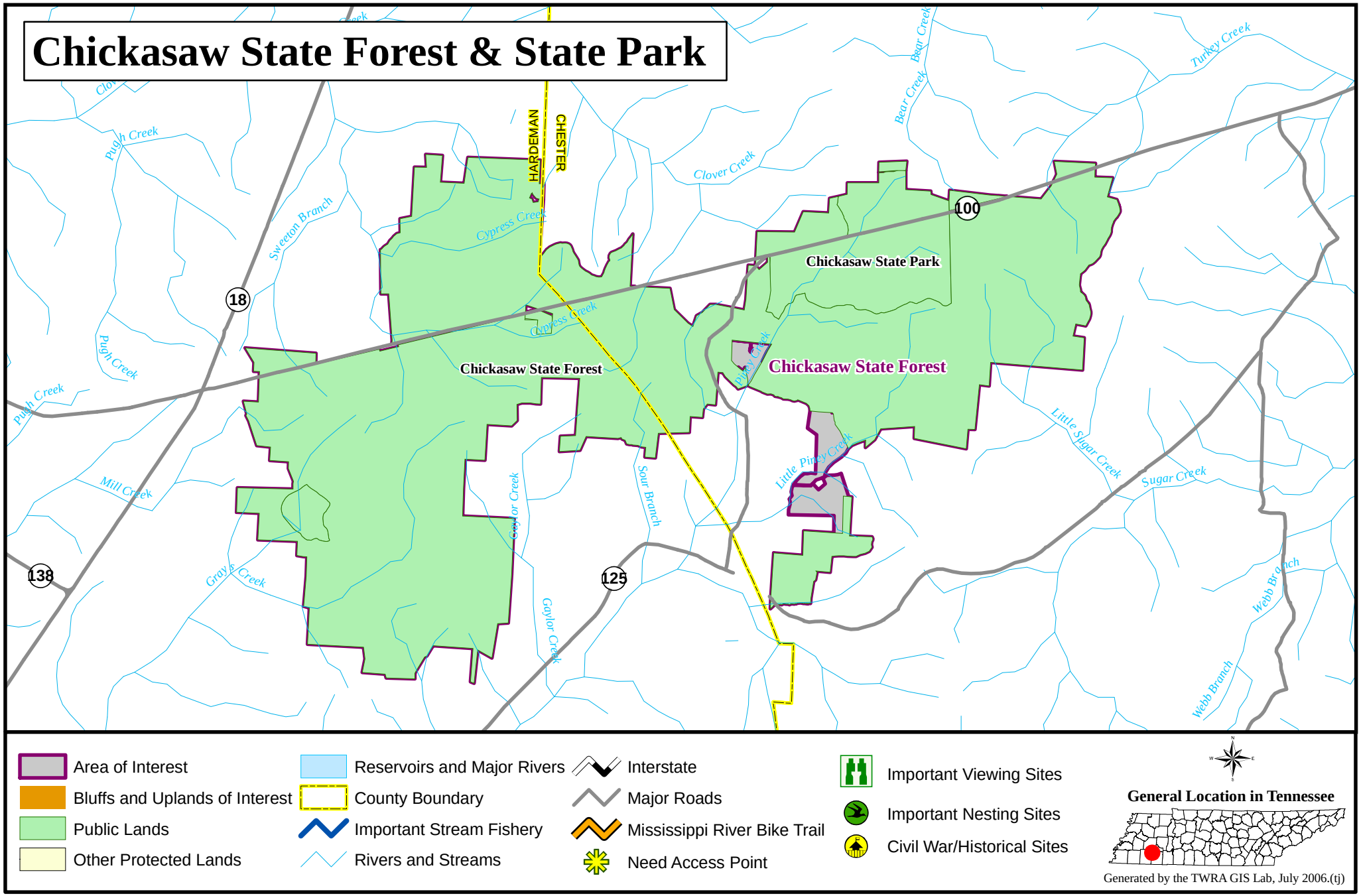
Significance – Chickasaw has been under TDF forest management planning process since 1980 and offers a prime example of forest management over a long period of time. Since the Chickasaw Forest surrounds the Park, the area is heavily utilized for recreation and hunting. TWRA has identified Chickasaw and the lands west and north of the forest as important areas for bird conservation.

Strategy - Inholdings and connections to isolated parcels (Big Rock) disconnected from the main body of the forest are the primary criteria for acquisitions, with forest access and access control also being very important.

Land Protection Needs – 317 acres at an estimated cost of $350,100

Potential Partners - Unknown

Chickasaw State Forest & State Park



HATCHIE STATE SCENIC RIVER AND HABITAT CORRIDOR

Location – (N35.5042, W89.1513) The Hatchie River enters southwest Tennessee from Alcorn County, Mississippi about 34 miles south-southeast of Bolivar, TN in Hardeman County . The river flows north then west as it passes through McNairy, Hardeman, Madison, Haywood, Tipton, and Lauderdale Counties along its 183 mile journey before it empties into the Mississippi River at the Lauderdale-Tipton County line. Along its journey it passes through the Hatchie National Wildlife Refuge (Brownsville) and Lower Hatchie National Wildlife Refuge (part of the Mid-Mississippi Alluvial Valley Project). The Hatchie River was designated as a State Scenic River in 1970.

Description - The Hatchie River twists and turns for 183 miles through western Tennessee. The watershed is 2,568 square miles, including the portion of the Hatchie River in northern Mississippi. In general, the river is characterized by a wide forested floodplain containing wetlands, oxbow lakes, bottomland hardwood forests, and rich agricultural fields. The Hatchie River is a significant component of the 24 million-acre Mississippi River Alluvial Plain Ecoregion, which covers seven states in the lower Mississippi River Valley stretching from southern Illinois to the Gulf of Mexico.

For thousands of years native people were modifying the landscape; first competing with large predators for game, then as agriculture became more prevalent, clearing and burning forests to plant sunflowers and pigweed, beans, squash and corn. The most recent Native Americans to claim this territory were the Chickasaws. The Chickasaws mainly used West Tennessee as a hunting ground. The Hatchie was an important transport route for Native American, allowing them to float buffalo, deer and elk meat downstream in cypress dugouts to the Mississippi River to be shipped to other established settlements.

Toward the end of the 19th century many fauna were lost in West Tennessee. Elk were extirpated from the state in the 1860's. One of the last swallow-tailed kites in Tennessee was sighted near Brownsville in 1880. The last Carolina parakeet recorded in Tennessee was killed in Haywood County in 1876. Three years later, the last big flights of passenger pigeons in Tennessee were recorded near Brownsville.

Presently, hundreds of thousands of people live in the Hatchie River watershed. The upland forests have been cleared for cotton and other agriculture. However, the floodplain remains mostly in bottomland hardwood forests. This watershed is one of the most productive agricultural areas in the state.

Significance - The Hatchie River is remarkable as the longest free-flowing tributary of the lower Mississippi River. It is the largest forested floodplain remaining in Tennessee. Because it has remained unimpounded and unchannelized, the natural flood processes that drive the ecosystem are intact, sustaining the river and wetland habitats that support a rich ecological diversity. The Hatchie River ecosystem is a complex interconnected ecological system encompassing bottomland hardwood forests, canebrakes, swamps, and sloughs, rivers and lakes. These habitats support one of the most biodiverse systems in Tennessee with more than 100 species of fish and 35 species of mussels. With 11 species

of catfish, the Hatchie probably contains more species of catfish than any other river in North America. About 250 species of birds use the Hatchie's forests at some point during the year . Swainson's and cerulean warblers are some of the rarer birds found in its forests. There are at least 18 Tennessee rare species found in the Hatchie River, three of which are possible candidates for federal protection.

A partial listing of species of significance in the Hatchie includes game species such as white-tailed deer, eastern wild turkey, spotted/largemouth bass and crappie. This area also supports populations of non-game such as the federally endangered Hatchie burrowing crayfish, white wartyback, pink mucket, orange-foot pimpleback and ring pink mussels, several in-need-of-management species including the naked sand darter, scaly sand darter, northern madtom, alligator gar, eastern slender glass lizard, alligator snapping turtle, Swainson's warbler, cerulean warbler, Mississippi kite, barking treefrog, meadow jumping mouse, southern bog lemming, eastern big-eared bat, eastern woodrat, and southeastern shrew, two state threatened species including the western pigmy rattlesnake and the lark sparrow, and one sate endangered species (Bachman's sparrow). Also, the Hatchie River is the site of three ongoing species restoration projects (alligator gar, alligator snapping turtle, Mississippi kite).

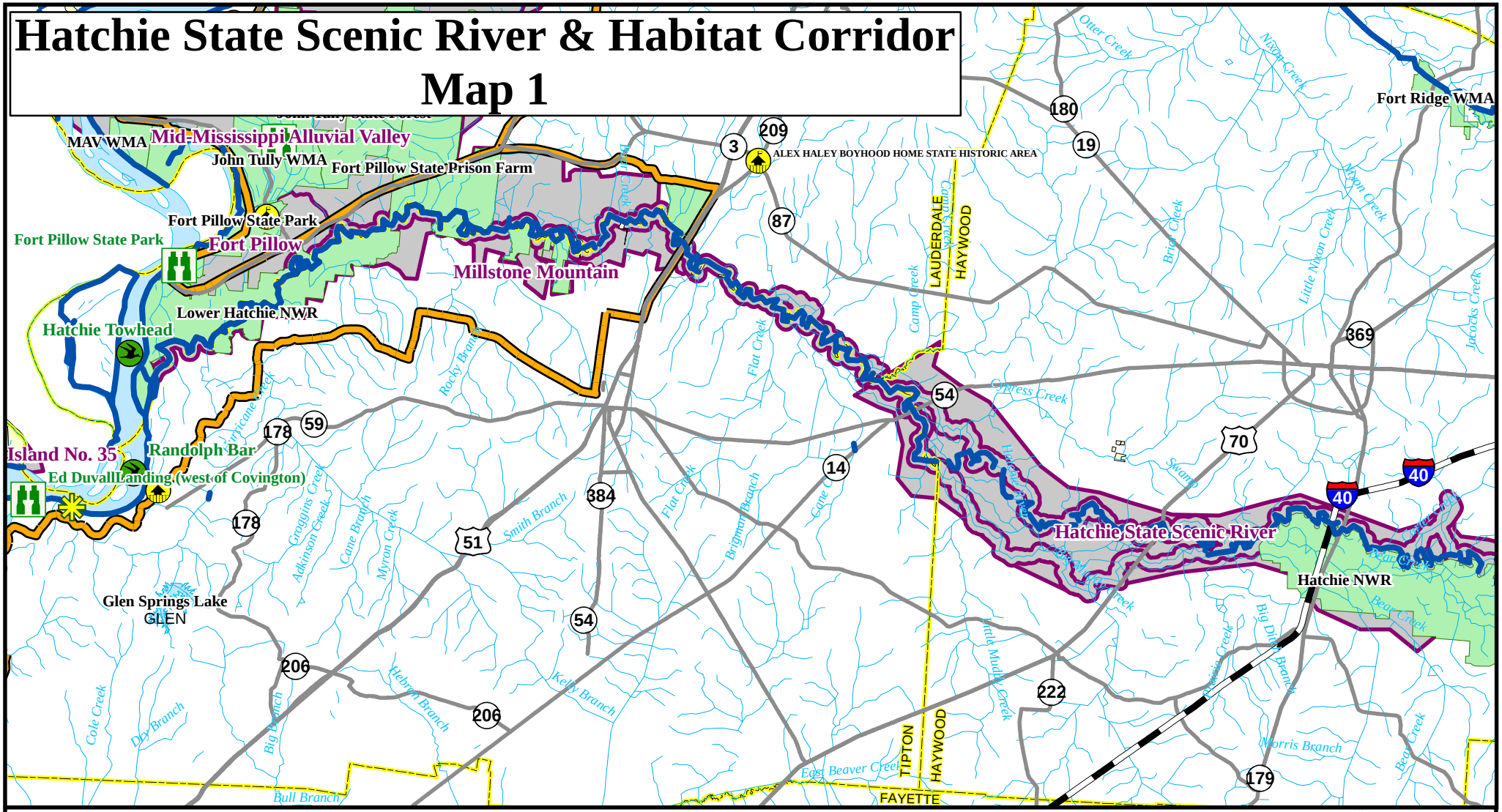
This area has been indicated as an area of "biological significance" in many plans including the "West Tennessee Conservation Plan" and "Tennessee's Comprehensive Wildlife Conservation Strategy". Additionally, there are at least four significant archaeological sites identified in this project area

Strategy – The floodplain of the Hatchie River is extensive, covering almost 95,000 acres. The site conservation plan for the Hatchie State Scenic River follows the guidelines of the State Scenic River Act and identifies a corridor of no more than 1,000 feet from the center of the river. Additionally, located along the Hatchie State Scenic River are other conservation lands, public and private, that include an area greater than that included within the Scenic River Boundary. These areas will be in addition to the conservation needs for the Scenic River. It may not be practical for the state or federal government to own and manage all of the lands within the scenic river and habitat corridor, however, through a public and private partnership involving innovative conservation approaches and private landowner incentives, it is hoped that the vast floodplain of the Hatchie River can be conserved. The needs presented here are viewed as long term goals possibly encompassing a time frame of 50-100 years.

Land Protection Needs - 84,287 acres at an estimated cost of $106,500,000.

Potential Partners – TNC, QU, NWTF, TDEC, TWRA, USFWS, WRC, Shelby County Government, Fayette County Government, and Chickasaw Basin Authority.

Hatchie State Scenic River & Habitat Corridor
Map 1



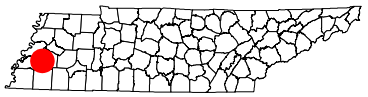
Area of Interest
Bluffs and Uplands of Interest
Public Lands
Other Protected Lands

Reservoirs and Major Rivers
County Boundary
Important Stream Fishery
Rivers and Streams

Interstate
Major Roads
Mississippi River Bike Trail
Need Access Point

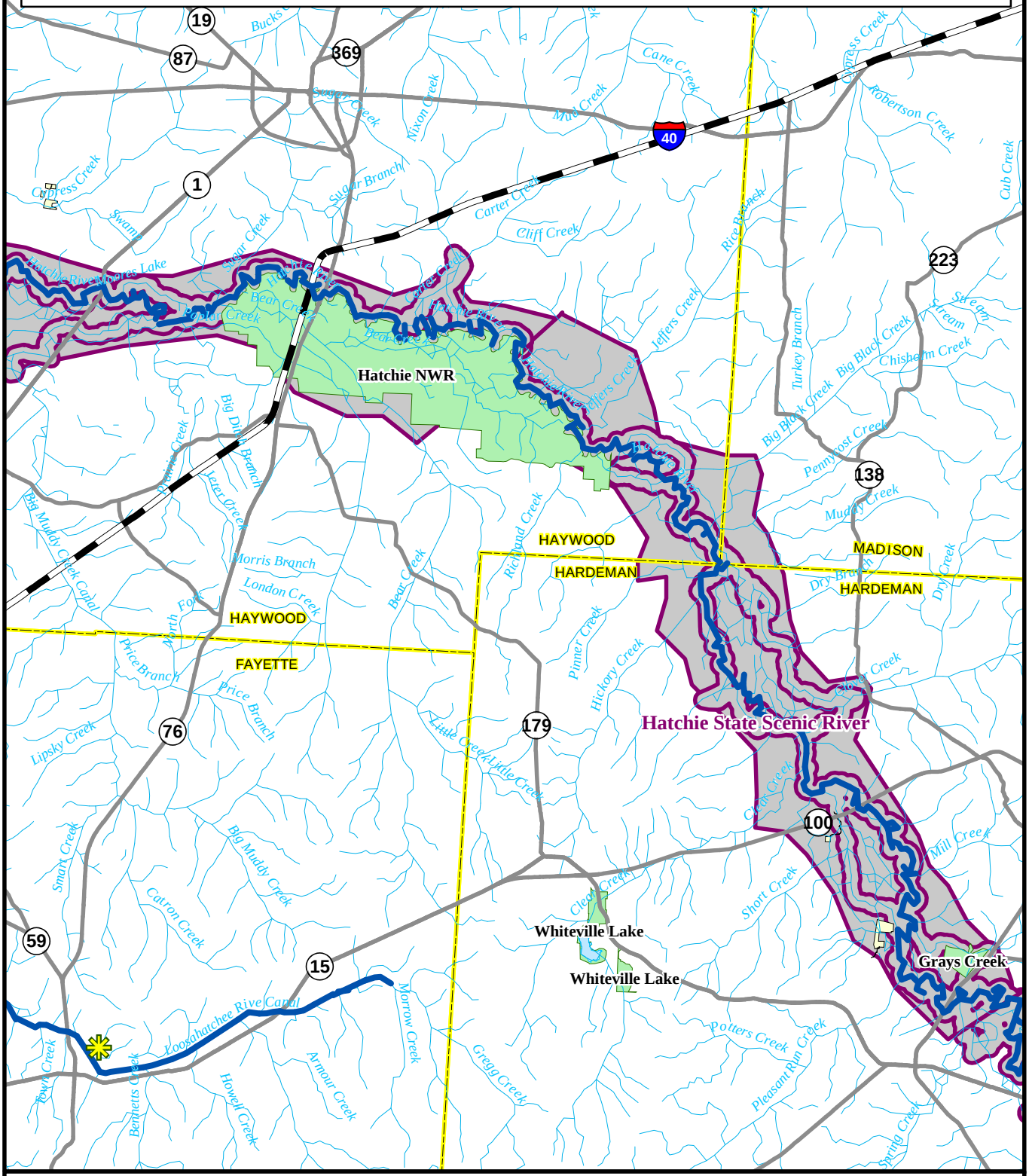
Important Viewing Sites
Important Nesting Sites
Civil War/Historical Sites

General Location in Tennessee

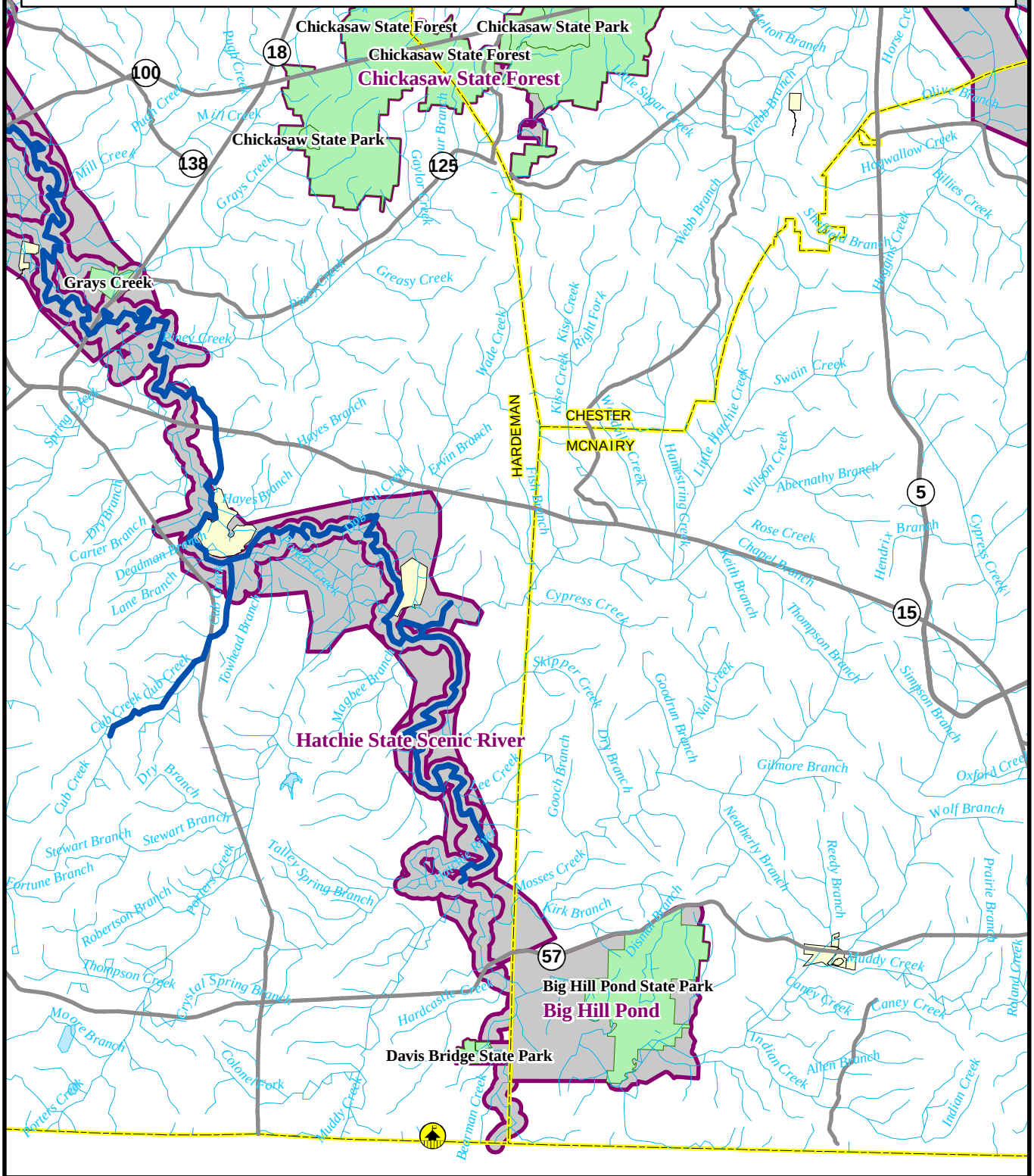


Generated by the TWRA GIS Lab, July 2006.(tj)

Hatchie State Scenic River & Habitat Corridor
Map 2



Hatchie State Scenic River & Habitat Corridor
Map 3



ISLAND 35 AND DENSFORD BAR

Location – (N35.5257, W90.0153) This project is located in the Mississippi River floodplain in Tipton County. Island 35 is on the west side of the river.

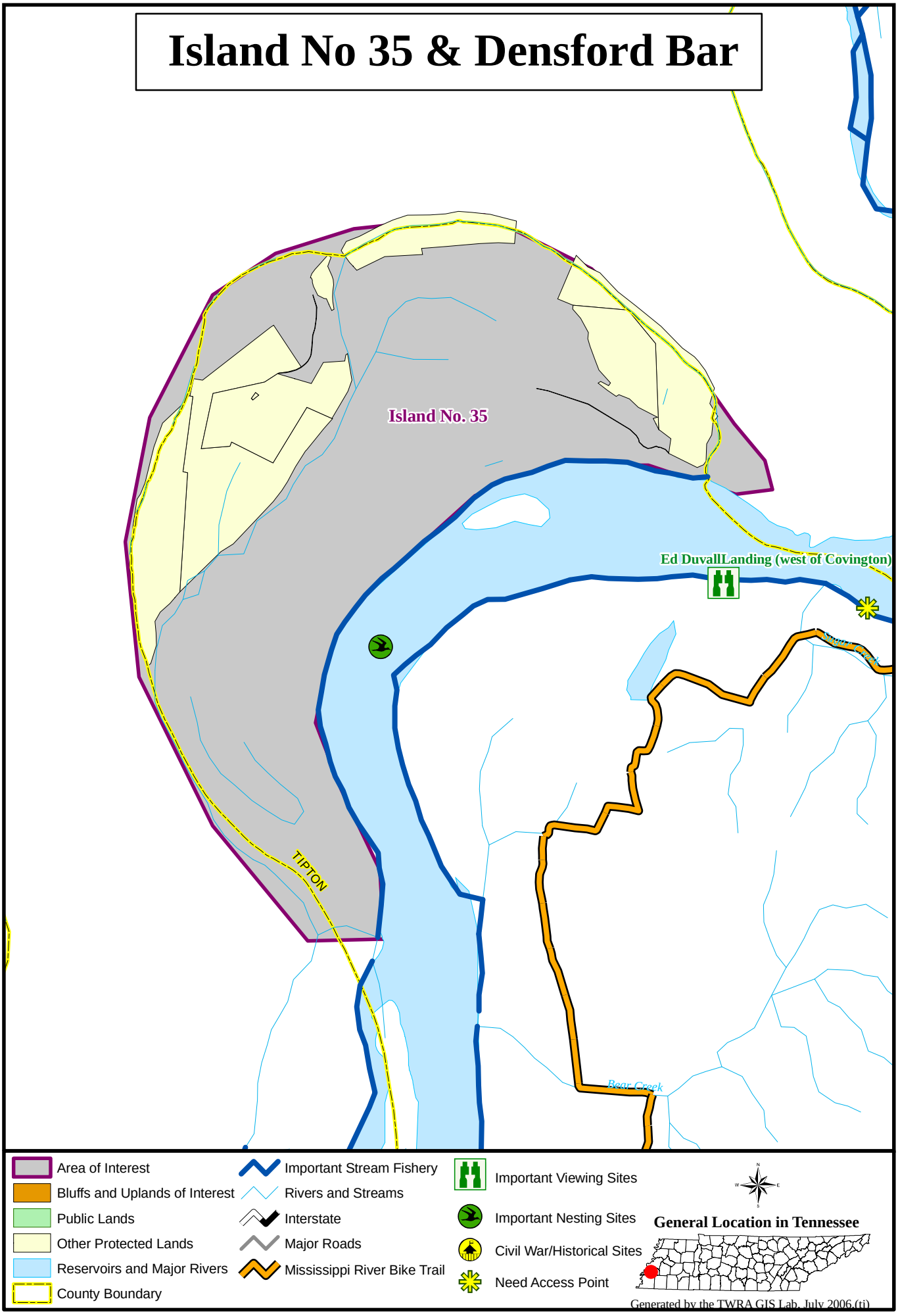
Description – The property was once part of the Mississippi River and an inactive chute separates the island from Arkansas. The island consists of exposed sand with vegetation on the higher ground.

Significance – The island is one link in a chain of several properties along the Mississippi floodplain that have been identified as important areas for restoration and conservation. Ownership of this property would allow the TWRA to work with partners to restore the floodplain function of this property. Specifically TWRA would like to reconnect the chute with the river so this channel can flood seasonally. The reestablished waterway would improve habitat for sport fish, paddlefish, catfish, and the endangered pallid sturgeon. The island is also important habitat for shorebirds including the endangered interior least tern.

Lands Protection Needs – 8,506 acres at an approximate cost of $11,557,800.

Potential Partners – Southeast Aquatic Resource Partnership, Lower Mississippi River Conservation Committee, USACE, TNC, and NRCS.

Island No 35 & Densford Bar



LOOSAHATCHIE BAR/ROBINSON CRUSOE ISLAND & ARMSTRONG BAR

Location – (N35.1841, W90.0940 and N35.0339, W90.2861) These properties are located in the Mississippi River floodplain in Shelby County. Loosahatchie Bar/Robinson Crusoe Island is directly west of Mud Island in Memphis. Armstrong Bar is located on the west side of the river in the southwest corner of Shelby County.

Description – Both areas are large sandbars that have been formed by deposited sand from the river. At one time these areas were connected to the river, but at present only inactive chutes remain. The land consists of exposed sand with vegetation on the higher ground.

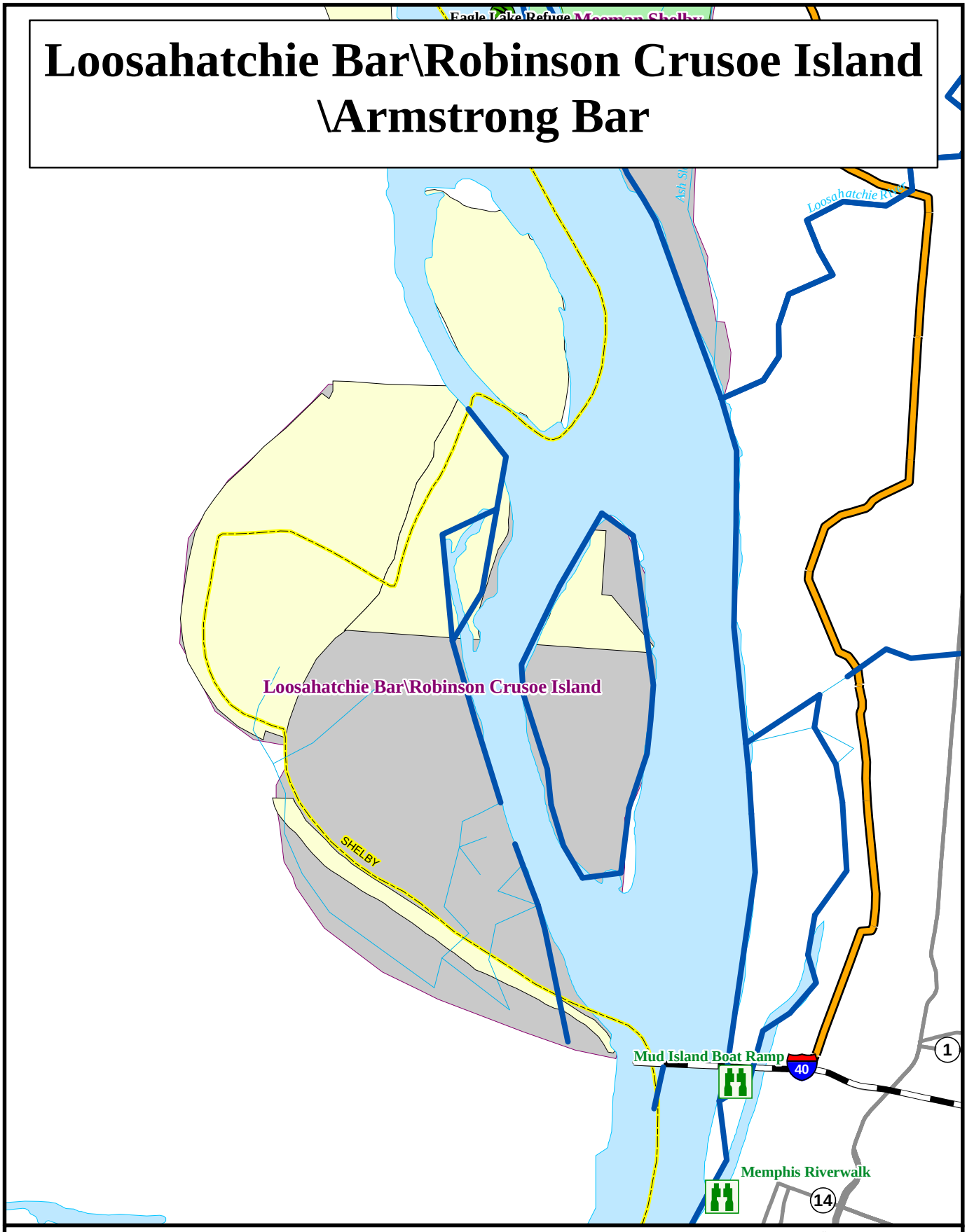
Significance – These areas are two links in a chain of several areas along the Mississippi floodplain that have been identified as important for restoration and conservation. Ownership of these properties would allow the TWRA to work with partners to restore the floodplain function and create additional habitat for wildlife. Specifically TWRA would like to partner with the USACE to reconnect the river to the back channels on these properties. The reestablished waterways would improve habitat for sturgeon, paddlefish, catfish, and many sportfish. These areas also provide important habitat for shorebirds including the endangered interior least tern. The shallow flats surrounding these areas currently provide habitat for juvenile fishes.

In the Loosahatchie Bar area TWRA wants to partner with the USACE to create habitat. Chevrons would be installed to create islands for shorebirds and create deep holes for fish. The opportunity to create islands within sight of Memphis is a unique opportunity. When complete, people could observe wildlife on these islands from the Memphis greenway along Mud Island. By adding more water to the backwater areas recreational fishing could be greatly improved.

Land Protection Needs – 2,813 acres at an approximate cost of $6,136,700**.**

Potential Partners – Southeast Aquatic Resource Partnership, Lower Mississippi River Conservation Committee, USACE, City of Memphis, TNC, and NRCS.

Loosahatchie Bar\Robinson Crusoe Island \Armstrong Bar

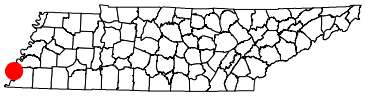


Area of Interest
Bluffs and Uplands of Interest
Public Lands
Other Protected Lands
Reservoirs and Major Rivers
County Boundary

Important Stream Fishery
Rivers and Streams
Interstate
Major Roads
Mississippi River Bike Trail

Important Viewing Sites
Important Nesting Sites
Civil War/Historical Sites
Need Access Point

General Location in Tennessee



Generated by the TWRA GIS Lab, July 2006.(tj)

LOWER OBION RIVER

Location – (N36.0488, W89.6131) The Lower Obion River project area is located in the downstream section of the Obion River in Dyer county approximately five miles west/northwest of Dyersburg.

Description – The project lies within the Mississippi Alluvial Valley. The Obion River is free-flowing although extensive sections of the river have been channelized. The area is wetlands, prior converted wetlands and associated uplands. Much of the bottomland hardwood forest has been removed in the process of converting a majority of this land to agricultural uses.

Significance – The corridor along the Mississippi river and its immediate tributaries has long been recognized as the most significant migratory bird corridor in the world. Annually, up to 50 million ducks, geese, shorebirds, wading birds, neotropical birds and raptors migrate through this general region of North America. Over the past hundred years, this region has seen some of the most dramatic habitat changes of any ecosystem in the country. It has been estimated that as much as 80% of the bottomland hardwood forest that dominated this area has now been removed. The remaining forest areas have been further degraded through fragmentation.

This project will protect this key area from further degradation plus allow for enhanced management activities that will increase the area's ability to provide habitat for at least 23 species of shorebirds including the least sandpiper and greater yellowlegs, 17 waterfowl species, 11 landbird species, and at least one waterbird species of concern in the Mississippi Flyway, the state and federally endangered interior least tern. Other rare birds that frequent the area include the Mississippi kite, Swainson's warbler, little blue heron and great egret. Activities to provide habitat for shorebirds during critical migratory periods will be undertaken.

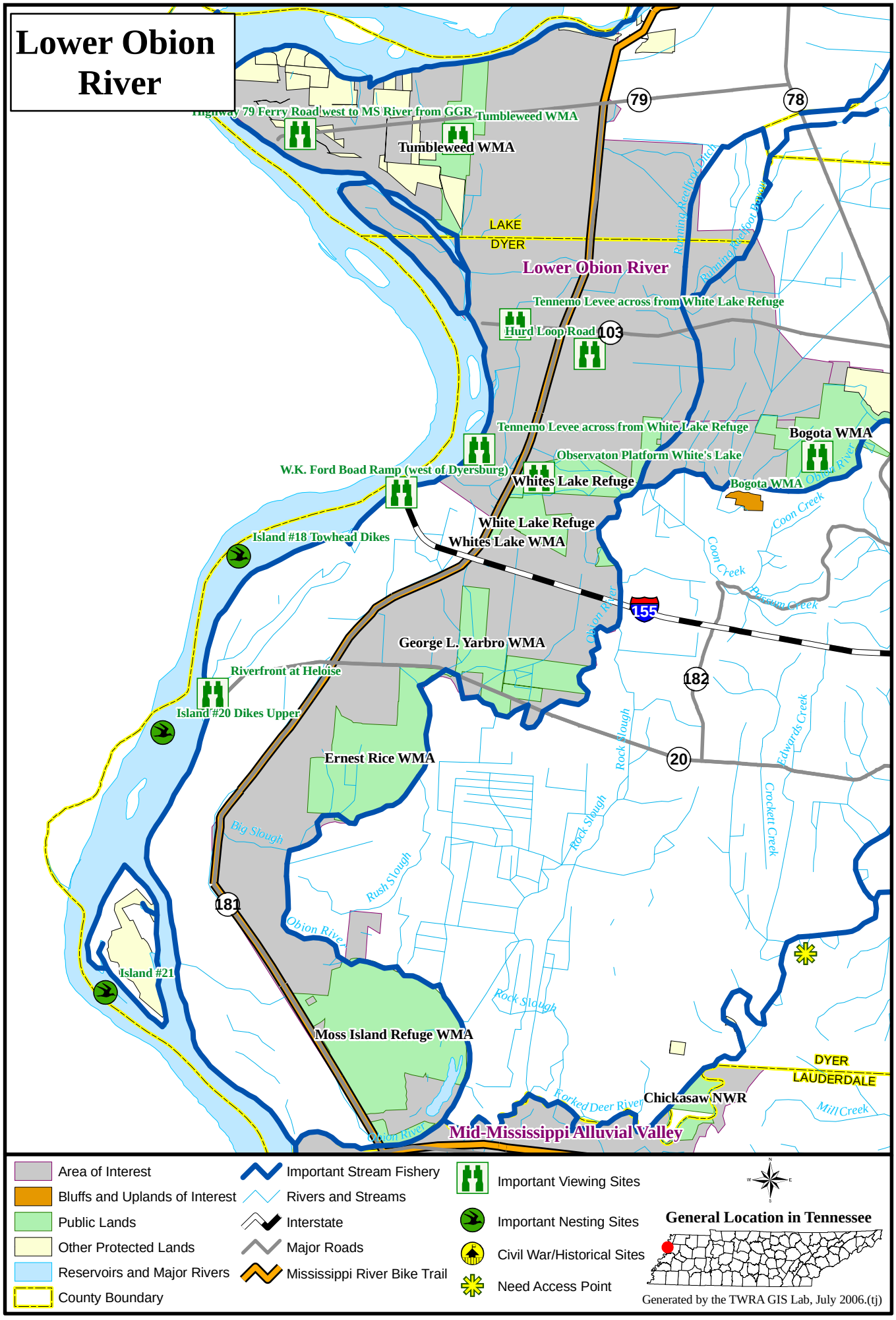
The Lower Mississippi Valley Joint Venture has delineated this general area as having potential to link fragmented bottomland hardwood forests (including already protected lands at White Lake Refuge, Thorny Cypress, E. Rice, Moss Island, Tumbleweed, and Bogota) thus creating larger functional forest patches for species that require large to very large blocks of forest in order to maintain "source" breeding populations. This area could provide a functional forestland patch of 20,000 acres and critical habitat for Swainson's and cerulean warblers.

This area contains nine of the birding sites listed in the "Great River Birding Trail Plan". However, only four of the birding sites are now protected. An observation tower has already been constructed at White Lake Refuge. Three fishing access sites are located within this project area and one proposed fishing access site is proposed just east of the project area.

The area near Lenox is the site of at least two significant prehistoric Indian sites that are in need of protection. Additionally the viewscape from the bluffs at Lenox and north along the Obion River give visitors an exceptional view both to the west and north.

Land Protection Needs – 11,349 acres at an estimated cost of $25,367,616

Potential Partners – The USFWS has identified this region as an important wetland area and has partnered in past activities through the North American Wetlands Conservation Act. They likely will continue to be a strong partner in this project. DU, NWTF, TPGF, and TCF are potential partners as well. The USACE will be spending approximately three millions dollars developing waterfowl habitat in the area.


Lower Obion River
Highway 79 Ferry Road west to MS River from GGR
Tumbleweed WMA
Tumbleweed WMA
LAKE
DYER
Lower Obion River
Tennemo Levee across from White Lake Refuge
Hurd Loop Road
Tennemo Levee across from White Lake Refuge
Bogota WMA
Observaton Platform White's Lake
W.K. Ford Boad Ramp (west of Dyersburg)
Whites Lake Refuge
Bogota WMA
White Lake Refuge
Whites Lake WMA
Island #18 Towhead Dikes
George L. Yarbro WMA
Riverfront at Heloise
Island #20 Dikes Upper
Ernest Rice WMA
Island #21
Moss Island Refuge WMA
Chickasaw NWR
DYER
LAUDERDALE
Mid-Mississippi Alluvial Valley
Running Reelfoot Ditch
Running Reelfoot Bayou
Coon Creek
Obion River
Rock Slough
Edwards Creek
Crockett Creek
Big Slough
Rush Slough
Forked Deer River
Mill Creek
79
78
103
155
182
20
181
Area of Interest
Bluffs and Uplands of Interest
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Other Protected Lands
Reservoirs and Major Rivers
County Boundary
Important Stream Fishery
Rivers and Streams
Interstate
Major Roads
Mississippi River Bike Trail
Important Viewing Sites
Important Nesting Sites
Civil War/Historical Sites
Need Access Point
General Location in Tennessee
Generated by the TWRA GIS Lab, July 2006.(tj)

MEEMAN SHELBY FOREST STATE PARK AND SNA AND EAGLE LAKE REFUGE

Location – (N35.3301,W90.0700) Meeman Shelby is located approximately 15 miles north of Memphis near Millington along the Mississippi River in Shelby County

Description: Meeman Shelby Forest State Park was established in 1938 by the National Park Service, but was later transferred to the State of Tennessee. The area has been managed as both a state park and a WMA since 1950. Eagle Lake Refuge (3,200 acres) was acquired in 1992 by TWRA. Approximately 11,000 acres of the park are designated as a SNA.

Bordering on the mighty Mississippi River, two-thirds of this 17,700-acre state park/SNA/ WMA are bottomland hardwood forests of large oak, cypress and tupelo. The area also contains two lakes and many miles of hiking trails. The Meeman Museum and Nature Center is named for Edward J. Meeman, courageous conservation editor of Scripps-Howard newspapers who helped establish this park and the Great Smoky Mountains National Park. Adjoining the area to the south is Eagle Lake Refuge which comprises 3,200 acres of prior converted wetlands. Deer, turkey, beaver and some 200 species of birds, including waterfowl and shorebirds are abundant. A public boat ramp provides fishing access to the Mississippi River.

Significance – (Site significance – B3) The area is significant for its protection of the now diminishing southern bottomland hardwood forest. This type of ecosystem is comprised of perennial wetlands, sloughs, and low gradient streams. The abundance of food, water, and cover allow a variety of wildlife to exist. It is particularly significant because so much of west Tennessee's rivers and streams have been seriously altered, resulting in a loss of vast bottomland hardwood forests that were once prevalent. This large natural area provides refugia for many populations of rare species including creeping spot-flower (*Acmella oppositifolia*), copper iris (*Iris fulva*), and cedar elm (*Ulmus crassifolia*). The interior least tern and bald eagle are two federally listed bird species that have been recorded in the bottomlands here. The area is also home to 11 state champion trees. Cypress sloughs are dominated by bald cypress and southern hackberry with an understory of black willow, green ash, and water elm. Bottomland hardwoods are dominated by cottonwoods, sycamore, and southern hackberry. The Chickasaw Bluffs also support unique plant communities. The bluff vegetation is variable according to slope aspect but is characterized by sweet gum, tulip poplar, white and red oaks, and beech with a distinctive understory of red buckeye.

This is one of the most biologically diverse areas in west Tennessee. Over 200 avian species are known to occur on the Shelby/Eagle Lake complex. Cerulean, prothonotary, northern parula, Swainson's, and worm-eating warblers all breed within the boundaries of Meeman Shelby. Each of those species is very high on the Partners in Flight (PIF) priority list. In May 2004 more than 50 Mississippi kites, another PIF high priority species, were observed foraging above the WMA at one time.

With the Memphis skyline visible to the south, these areas are a recreational hub for the largest metropolitan area on the Mississippi River between St. Louis and New Orleans. An estimated 1,030,000 visitor days are spent by outdoor enthusiasts enjoying the birdwatching, hunting, fishing, hiking, etc. that these areas have to offer. The area has a wildlife viewing platform and is a significant site on the Great River Birding Trail. This area also provides lake fishing and boat access to the Mississippi River for fishing.

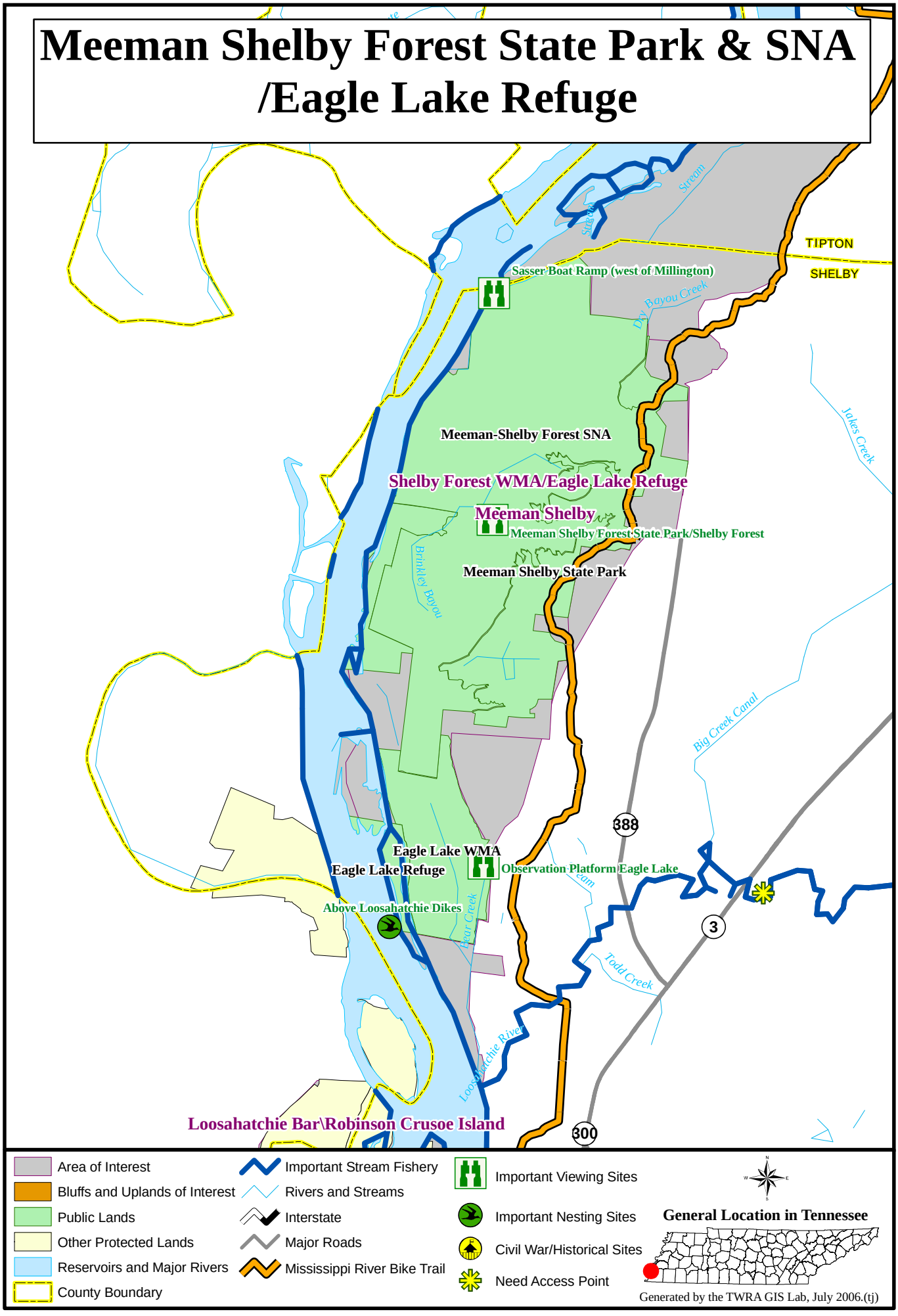
The potential for development of inholdings threaten the diversity of this area. Continued development of the boundary areas could diminish the project's effectiveness to provide adequate habitats for species listed above.

The area is below the 20,000 acre minimum forest patch size required for viable populations of certain migratory songbirds as identified by PIF. Only one such area now exists in Tennessee, but expansion and reforestation could help enable this project area to qualify as one or the four areas needed in the Mississippi Alluvial Valley.

Land Protection Needs – State Parks - 600 acres at an estimated cost of $5,000,000; SNA – 1,121 acres at an estimated cost of $5,044,500; WMA – 3,228 acres at an estimated cost of $6,500,000.

Potential Partners – TDEC and TWRA. TWRA has already partnered with DU and the USFWS in the acquisition of more than 3,200 acres at Eagle Lake Refuge in the past 10 years. Currently, we are partnering with TPGF on the acquisition of several hundred additional acres. Tennessee Ornithological Society has provided technical support for this project.

Meeman Shelby Forest State Park & SNA /Eagle Lake Refuge



MID-MISSISSIPPI ALLUVIAL VALLEY

Location – (N35.7595, W89.7100) The Mid-Mississippi Alluvial Valley is an extensive project area located along the Mississippi River 30-60 miles north of Memphis. It encompasses several existing sub-projects including Lower Hatchie National Wildlife Refuge, Chickasaw National Wildlife Refuge, Sunk Lake SNA, John Tully WMA, and Fort Pillow State Historic Park Fort Wright, and Millstone Mountain.

Description – The project lies within the Mississippi Alluvial Valley. A significant portion of the project lies within the annual floodplain of the Mississippi River. The area is wetlands, prior converted wetlands and some associated uplands. In certain areas, much of the bottomland hardwood forest has been removed in the process of converting the land to agricultural uses. However, approximately 30% of the project area still remains bottomland hardwood forest in blocks ranging in size from a few acres to several thousand acres.

Fort Pillow (1,642 acres) lies to the south along the Chickasaw Bluffs overlooking the Mississippi River. This area is rich in both historic and archaeological significance. In 1861, the Confederate Army built extensive fortifications here and named the site for General Gideon J. Pillow of Maury County. Because of its strategic location, the fort was taken by the Union Army who controlled it during most of the war. Remains of the earthworks are well-preserved. On April 12, 1864, Confederate General Nathan Bedford Forrest and approximately 1,500 Confederate soldiers attacked Fort Pillow. The Union garrison had 550 soldiers; almost half of which were black troops. Major William F. Bradford refused to surrender and subsequently lost the battle after the fort was stormed by Forrest's troops. Because of high casualties among the black Union troops, the Confederates were accused of perpetrating a massacre. Controversy surrounding the battle still exists today.

Another 200 acres is proposed for National Register status known as Fort Wright including fortification and arms storage remains. The brick powder magazine is the only known surviving Confederate powder magazine in the South.

Sunk Lake SNA is an 1,870 acre B3 SNA cooperatively managed by the USFWS as part of the Lower Hatchie National Wildlife Refuge. The forests at Sunk Lake surround a series of six shallow depressional lakes within the floodplain of the Mississippi River. The Five Hundred Pound Lake derives its name from a local fisherman's account of having caught 500 pounds of buffalo fish there in one day. The lakes within the preserve were created by the same series of the New Madrid earthquake that created Reelfoot Lake. The floodwaters from the Mississippi River recharge the lakes approximately every five years. Recent additions to the natural area include farmland that is being planted with cherry oak, Nuttall oak, willow oak and other bottomland species to restore the bottomland hardwood forest.

It supports excellent examples of bald cypress swamp, bottomland hardwood forest, and open marshy aquatic habitat. The diversity of wetland and upland communities offer a wide range of habitat for waterfowl and other birds, fish, reptiles, amphibians, and both

native terrestrial and aquatic vegetation. Rare plant species at Sunk Lake include creeping spot-flower (*Acmella oppositifolia*), featherfoil (*Hottonia inflata*), lake cress (*Neobeckia aquatica*), ovate-leaved arrowhead (*Sagittaria platyphylla*) and cedar elm (*Ulmus crassifolia*).

Millstone Mountain is a prominent upland knob in the Coastal Plain physiographic province. The area contains boulder-sized rocks and differs from much of the deep, sandy-soiled land of West Tennessee. The upland forest consists of dry-mesic species, but also includes more xeric tree species such as southern red oak, blackjack oak, and post oak. This area contrasts with the lowlands of the Hatchie River just to the north. In the early 1990s, the Tennessee Division of Natural Areas was involved with botanical inventories of the site. In 2001, TNC purchased 182 acres along the Hatchie River, and approximately 42 acres of the TNC property includes uplands within the Millstone Mountain site design. In 2002, the USFWS purchased 161 acres and expects to purchase more of the site in the future.

Site Importance High (B3) - At least seven state-listed plant species occur on the upland portion of Millstone Mountain. Five of the species earleaved false foxglove (*Agalinis auriculata*), red starvine (*Schisandra glabra*), small-laved panicgrass (*Panicum ensifolium*), creeping spotflower (*Acmella oppositifolia*), and nodding rattlesnake root (*Prenanthes crepidinea*) are considered very rare and imperiled (S2) in Tennessee. It is unclear the full extent of these plant occurrences and how much of each occurrence grows on TNC or USFWS lands.

The protection of the entire Millstone Mountain would aid in protection of these rare species. Currently red starvine is only known from three counties in Tennessee. Outside of Millstone Mountain, the only public land where earleaved false foxglove is known to occur is the Fort Campbell Military Reservation and the proposed Crowder Cemetery Barrens Designated SNA. The only other public land for small-leaved panic grass is the Arnold Engineering and Development Center.

Significance – This project is the most extensive wetland project in Tennessee and seeks to restore and link up to 100,000 acres of fragmented bottomland forest. The area was identified by the Lower Mississippi Valley Joint Venture as the most feasible project for providing suitable habitat for the swallow-tailed kite, a species that generally requires a minimum of 100,000-acre blocks of bottomland forest.

The corridor along the Mississippi River and its immediate tributaries has long been recognized as the most significant migratory bird corridor in the world. Annually, up to 50 million ducks, geese, shorebirds, wading birds, neotropical birds and raptors migrate through this general region of North America. Over the past hundred years, this region has seen some of the most dramatic habitat changes of any ecosystem in the country. It has been estimated that as much as 80% of the bottomland hardwood forest that dominated this area has now been removed. The forest areas that remain are fragmented thereby degrading them even further.

This project will protect this key area from further degradation plus allow for enhanced management activities that will increase the area's ability to provide habitat for at least 23 species of shorebirds including the least sandpiper and greater yellowlegs, 17 waterfowl species, 11 landbird species, and at least one waterbird species of concern in the Mississippi Flyway, the state and federally endangered interior least tern. Other rare birds that frequent the area include the Mississippi kite, Swainson's warbler, little blue heron and great egret.

Due to its size, this project has potential to provide a significant amount of wildlife recreation. Its diverse habitats, species richness, proximity to Memphis, and location along the Great River Road leading to Reelfoot make it a very attractive destination for hunters, anglers, and especially wildlife watchers. The project area includes six of the birding sites included in the Great River Birding Trail that are already protected. Three public fishing access fishing sites exist in the project area and there is potential for others to be developed.

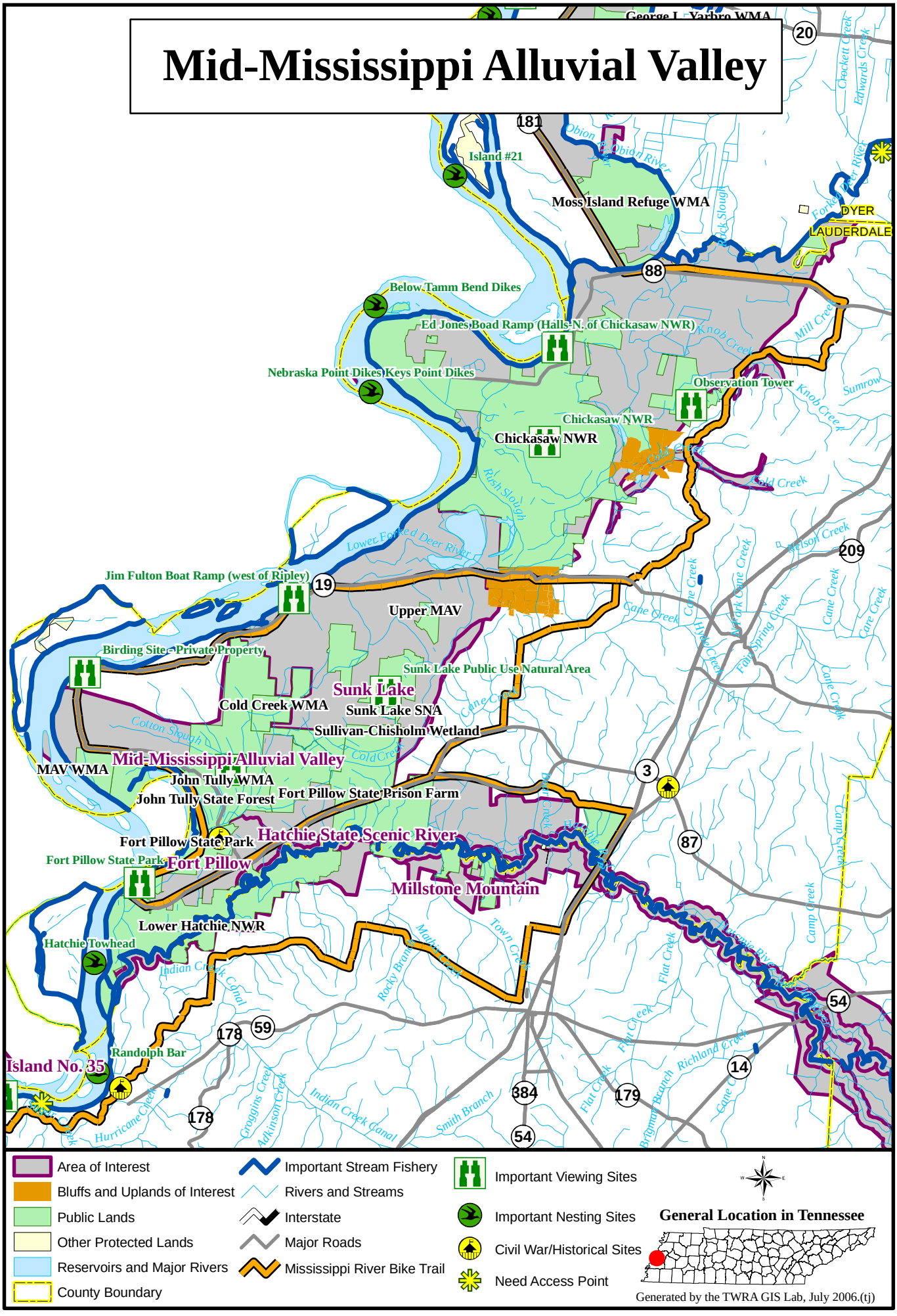
The lower portion of this project area also contains Chickasaw Bluff # 1 (near Ft Pillow) and Chickasaw Bluff # 2 (between Randolph and Richardson). In terms of viewscapes, these may be the most crucial areas along the entire length of the project as they provide spectacular views of the River and allow visitors to see the tremendous power and grandeur of this huge waterway. Much of Bluff # 1 is already protected by USFWS, TWRA, TDEC and Tennessee Department of Corrections. However, the entire area north of Hwy 59 between Randolph and Richardson (including Ft. Wright mentioned above) needs to be protected. Other significant viewscapes can be found at Hales Point which is one of the highest points in the corridor and at Arp where the bluff along Hwy. 19 is nearly 300 feet above the valley floor.

Adding to the area's cultural significance are six unprotected prehistoric Indian villages and temple mounds at Randolph, Richardson, and four other bluff sites south to and including northern Shelby County.

Land Protection Needs – Sunk Lake SNA - 23,402 acres at an estimated cost of $58,505,000; Fort Pillow SHP – 100 acres at an estimated cost of $2,000,000; Ft Wright – 200 acres at an estimated cost of $3,000,000; Millstone Mountain SNA – 589 acres at an estimated cost of $883,500; USFWS Refuge - 14,241 acres at an estimated cost of $31,600,000; TWRA WMA – 478 acres at an estimated cost of $1,793,014.

Potential Partners – Past partners include DU, NWTF, TCF, TNC, TDEC, TWRA, and others. The USFWS already has two refuges within the project area and has committed to acquire and protect thousands of additional acres as they develop these two areas. Grants through the North American Wetland Conservation Act and the Forest Legacy program have already helped secure large acreages.

Mid-Mississippi Alluvial Valley



Area of Interest
Bluffs and Uplands of Interest
Public Lands
Other Protected Lands
Reservoirs and Major Rivers
County Boundary

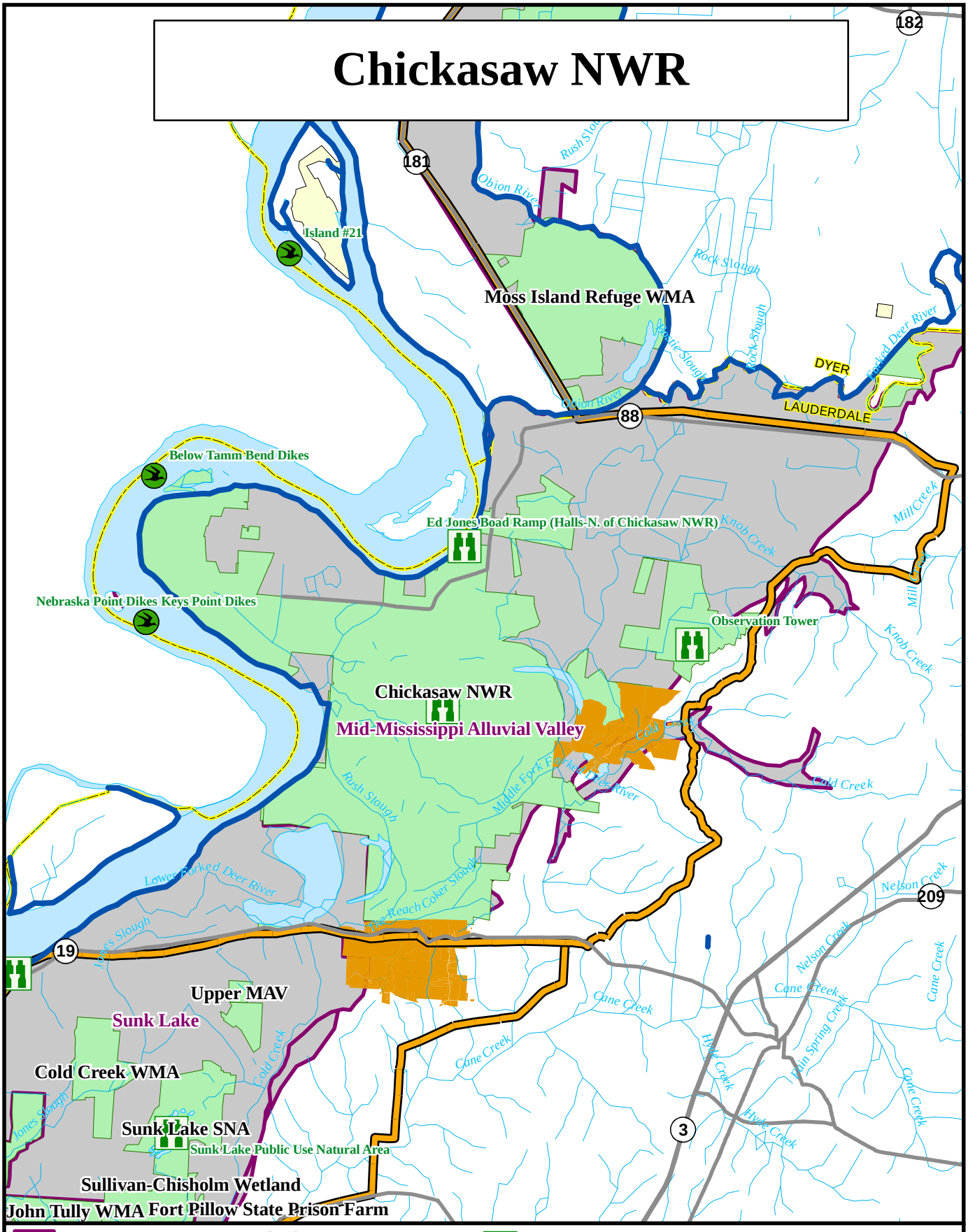
Important Stream Fishery
Rivers and Streams
Interstate
Major Roads
Mississippi River Bike Trail

Important Viewing Sites
Important Nesting Sites
Civil War/Historical Sites
Need Access Point

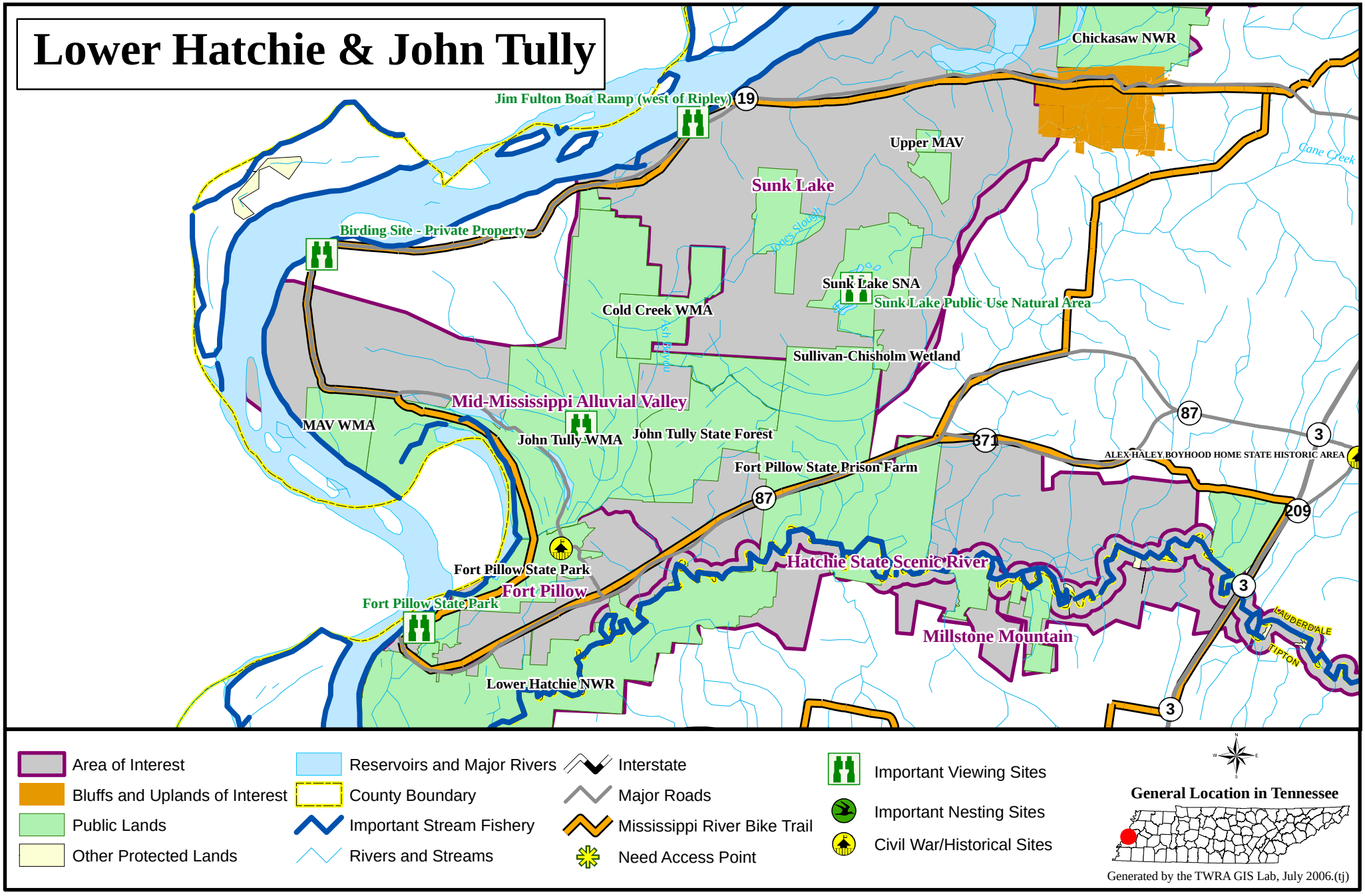
General Location in Tennessee

Generated by the TWRA GIS Lab, July 2006.(tj)

Chickasaw NWR



Lower Hatchie & John Tully



- Area of Interest
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- Civil War/Historical Sites

General Location in Tennessee

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MIDDLE FORK OF FORKED DEER HABITAT CORRIDOR

Location – (N35.8972, W98.1817) This habitat corridor encompasses the Middle Fork of the Forked Deer River in Dyer, Crockett and Gibson Counties upstream from Dyersburg to just west of Humbolt. Included as subunits of this project are Tigrett WMA, Eaton Bottoms Wetland, and Horns Bluff Refuge.

Description of Property – The Middle Fork has been subjected to extensive channelization over the past century. Only about 20% of the original bottomland hardwood forests remain and even those areas are under threat due to poor wetland function. Much of the land near the old meander scares are scrub vegetation including privet, willow, buttonbush, cypress, water tupelo and maple. There are isolated pockets on the higher ridges composed of overcup, willow and water oak.

In 1958 the Tennessee Game and Fish Commission purchased the first tract of land that now makes up the 7,600 acre Tigrett WMA. Eaton Bottoms and Horns Bluff Refuge were purchased by TWRA in the 1990's with funds from the Wetlands Conservation Act.

Significance –Even though the Middle Fork has been extensively channelized, the river and its associated terrestrial habitats remain important habitat for a vast variety of wildlife species. As a tributary of the Mississippi River, the Forked Deer lies within the Mississippi Flyway, perhaps the most significant migratory bird migration route in the world. Tigrett WMA is an important ecosystem for wading birds, waterfowl, mammals, reptiles and amphibians. Some of the wetland species that inhabit Tigrett WMA that are in need of management are, bald eagles (nesting), Mississippi kites, great egrets (nesting), northern harriers, little blue herons(nesting), alligator gar and alligator snapping turtles. In addition, Tigrett WMA provides important nesting habitat for prothonotary warblers, wood ducks, and great and little blue egrets.

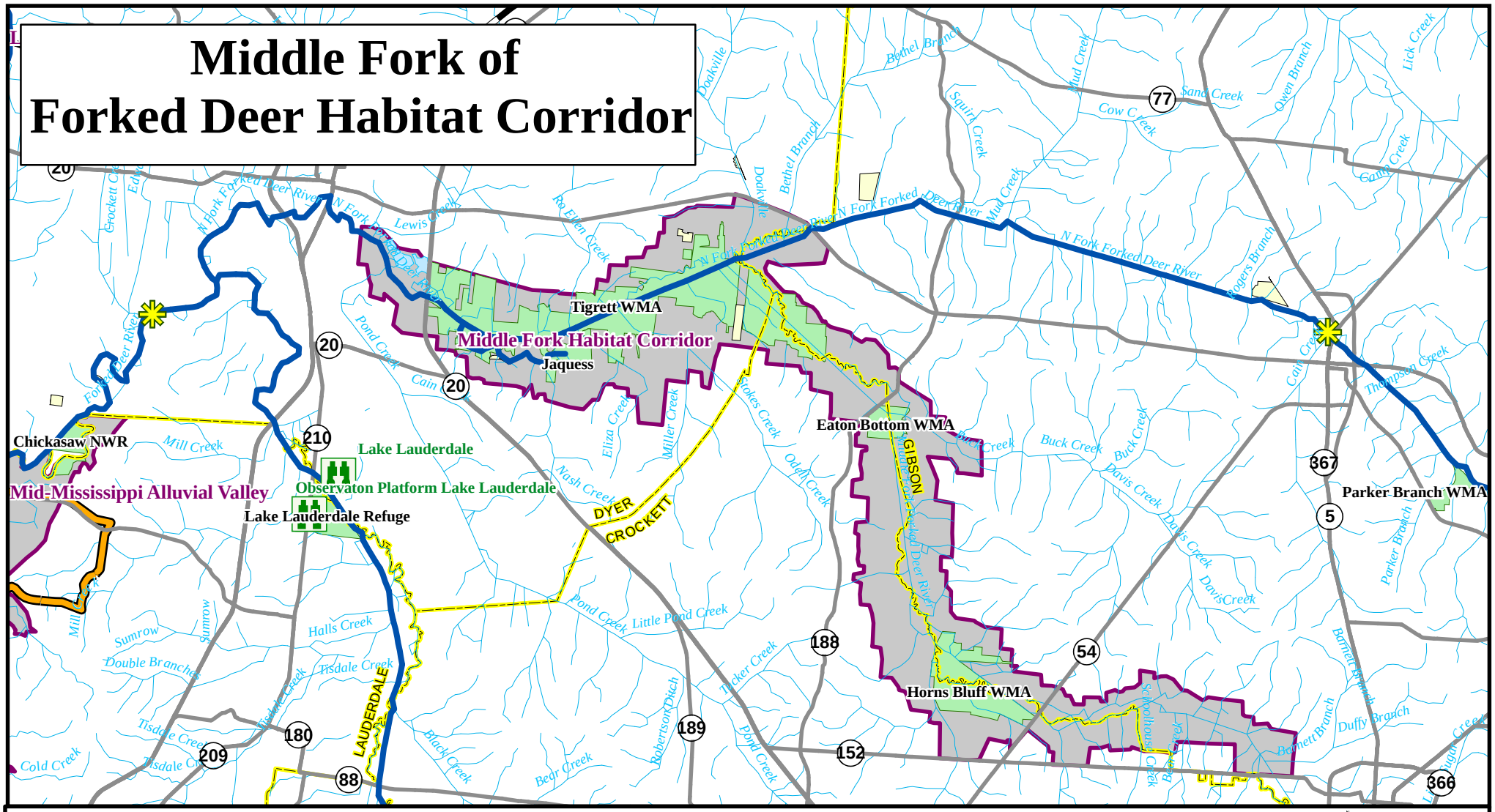
The potential to restore river and its associated floodplain makes this project a very high priority project. Not only would habitats that are created benefit waterfowl, wading birds, shorebirds and other migratory species, but improved wetland functions could enhance groundwater recharge, reduce sediment transfer downstream, and help minimize downstream flooding.

Strategy – It will be important to acquire in-holdings first. The next priority will be land adjoining already protected areas with the ultimate goal of acquiring significant properties within the 5-year floodplain to begin the process of restoration of the river and the habitats.

Land Protection Needs – 22,983 acres at an estimated cost of $45,396,400.

Potential Funding – Wetland Acquisition Fund, North American Wetland Conservation Fund, Tennessee Parks and Greenways, DU, NWTF, and QU.

Middle Fork of Forked Deer Habitat Corridor



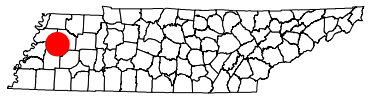
Area of Interest
Bluffs and Uplands of Interest
Public Lands
Other Protected Lands

Reservoirs and Major Rivers
County Boundary
Important Stream Fishery
Rivers and Streams

Interstate
Major Roads
Mississippi River Bike Trail
Need Access Point

Important Viewing Sites
Important Nesting Sites
Civil War/Historical Sites

General Location in Tennessee



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NATCHEZ TRACE STATE FOREST & STATE PARK

Location – (N35.8176, W88.2432) Natchez Trace State Forest is located along I-40 in Henderson, Carroll, Benton and Decatur Counties approximately 10 miles northeast of Lexington, TN.

Description - Natchez Trace State Forest - (35,904 acres)

The Forest originated from lands purchased by the Resettlement Administration and became a State Forest in 1949. At the time of purchase the land was severely abused by poor agricultural practices that caused severe erosion and resulted in a deeply gullied landscape. When the TDF took over management of the land, the emphasis for many years was on fire control and establishment of vegetation to prevent erosion. Loblolly pine, because of high rates of litter production, proved very satisfactory for that purpose and hundreds of acres of pine plantations were established. The Forest now supports 24,057 acres of hardwood types and 11,153 acres of pines. Hardwood stands exceeding 60 years of age occur on 13,926 acres on land that was never cleared for agriculture or had been abandoned for farming. On the other hand, 20,301 acres support trees whose age is 10 to 60 years and probably originated on former farmland.

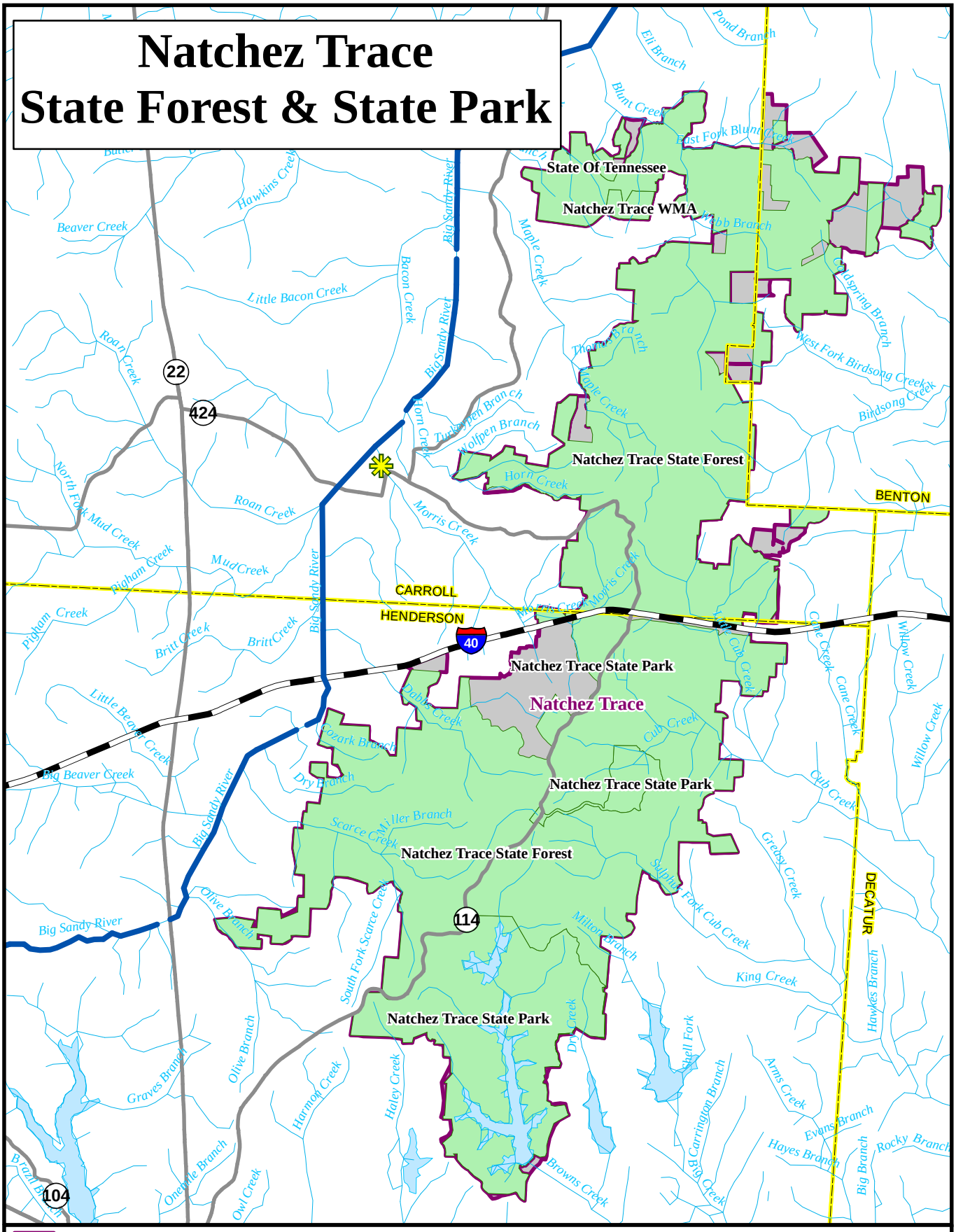
Significance – The State Forest and Park complex located along I-40 make this area important for recreation of all types, demonstrations and public education of forestry practices.

Strategy - Inholdings and connections to isolated parcels of the forest are the primary criteria for acquisitions, with forest access and access control being very important.

Land Protection Needs – 2,640 acres at an estimated cost of $2,045,300.

Potential Partners – unknown

Natchez Trace State Forest & State Park

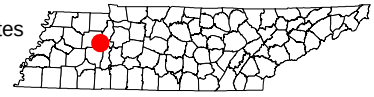


Area of Interest
Bluffs and Uplands of Interest
Public Lands
Other Protected Lands
Reservoirs and Major Rivers
County Boundary

Important Stream Fishery
Rivers and Streams
Interstate
Major Roads
Mississippi River Bike Trail

Important Viewing Sites
Important Nesting Sites
Civil War/Historical Sites
Need Access Point

General Location in Tennessee



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REELFOOT LAKE COMPLEX

Location – (N36.4039, W89.3272) Reelfoot Lake is located in Lake and Obion Counties in extreme northwest Tennessee and near the communities of Samburg and Tiptonville. A portion of the lake extends into southwestern Kentucky near the town of Fulton. The lake lies approximately three miles east of the Mississippi River.

Description – Reelfoot Lake was created by a series of earthquakes in the winter of 1811-1812. It is largest natural lake in Tennessee encompassing more than 10,000 acres of water and another 5,000 acres of marshes and hardwood wetlands. While the lake may have been as deep as 40 feet when first created, lake depths now are generally less than 20 feet due to extensive siltation. It is estimated that more than 40% of the lake has a depth of three feet or less. Approximately 30,000 acres of the lake and surrounding marshes and watershed are protected. Management of the lake is primarily vested with three agencies (TWRA-17,500 acres; USFWS-12,300 acres; TDEC-300 acres). Approximately 18,000 acres of the lake have been designated as a SNA.

Significance – Reelfoot Lake and its associated habitats are internationally recognized for their diversity of wildlife species, scenic beauty and recreational opportunities. Reelfoot is designated by the USDI as one of only 14 National Natural Landmarks. Wildlife inhabiting the Reelfoot area includes over 50 species of mammals and over 70 species of amphibians and reptiles. Reelfoot is the only area of the state in which seven species of watersnakes can be found, including the midland, yellow-bellied, broad-banded, Mississippi green, diamond-backed, northern and red-bellied watersnakes. There are more than 34 rare animal and plant species that occur on the area including more than 14 rare bird species such as peregrine falcons, Swainson's warblers, and Mississippi kites. The lake is the winter home of more than 300 bald eagles and is one of the premier eagle viewing areas in eastern North America. Large populations of shorebirds, wading birds, and waterfowl migrate through the area each year making it one of the most significant natural migratory habitats in the country. At peak times, more than 750,000 waterfowl can be found using the area. The lake has had a national reputation for decades for its excellent waterfowl hunting.

Reelfoot Lake has seen considerable increases in sport fishing effort over the last decade and now boasts the highest number of angler hours per acre of any waterbody in the state. Marketing efforts by Reelfoot area business owners have been very effective in bringing in out-of-state anglers who provide a large boost to the area's economy. TWRA's 2003 creel survey indicated that 75.9% of interviewed anglers drove one-way distances greater than 100 miles to fish the lake. More than half of the anglers interviewed came from the states of Illinois, Indiana, Missouri, and Ohio. The creel survey estimated that 2003 anglers had a direct economic impact of $2.9 million dollars, which was the third highest value reported for any waterbody that year.

It is estimated that more than 1.7 million visitor trips each year are made to Reelfoot as people enjoy the very diverse natural resource recreational opportunities provided. The area contains nine of the birding sites listed in the "Great River Birding Trail" and has two observation towers, the most of any project area in West Tennessee.

Despite its abundant populations and the habitats that support them, the lake is being subjected to severe actions that are degrading and destroying the area. It is estimated that 1.4 million tons of silt are deposited in the lake each year, depending on the severity of rainfall events. According to an analysis by the TDEC in 1986, current rates of sedimentation will reduce the depth of the three major basins of Reelfoot Lake to less than two feet in 60 to 210 years. When created, the lake was surrounded by extensive bottomland hardwood forests. Today, only small fragments of the original forestland remain as agricultural encroachment pressures have resulted in the clearing of almost all of the unprotected floodplain areas and a significant portion of the "bluff" areas east of the lake.

The primary goal of the Reelfoot Lake project is to protect and restore the functional integrity of the Reelfoot Lake ecosystem, and to enhance the capability of this ecosystem to provide habitat for priority migratory birds and other fish and wildlife. To achieve this goal, we have identified important features in the Reelfoot Lake area primary zone of interest: 1) Sediment Retention Basin feature to reduce the sediment load entering the lake; 2) Water Fluctuation feature to remove agricultural constraints from the lower hydric soils around Reelfoot Lake, and allow managers greater flexibility in managing lake water levels; 3) Lake Outlet and Lake Isom NWR feature to restore wetland corridor between Reelfoot Lake and the lower end of Lake Isom; 4) Phillipy Pits feature to develop critical habitat for migrating shorebirds, and; 5) Reelfoot Bluffs feature to establish and protect a large patch of upland forest habitat for priority songbirds.

This project will protect this key area by at least slowing further degradation plus allow for enhanced management activities that will increase the area's ability to provide habitat for at least 23 species of shorebirds including the least sandpiper and greater yellowlegs, 17 waterfowl species, 11 landbird species, and at least one waterbird species of concern in the Mississippi Flyway, the state and federally endangered interior least tern. Other rare birds that frequent the area include the Mississippi kite, Swainson's warbler, little blue heron and great egret. Activities to provide habitat for shorebirds during critical migratory periods will be undertaken. Protecting existing forest patches and reforestation will result in creating larger functional forest patches for species that require large to very large blocks of forest in order to maintain "source" breeding populations. This area could provide a functional forestland patch of 20,000 acres and critical habitat for Swainson's and cerulean warblers. Development of the Sediment Basin project should significantly reduce siltation and extend the life of the lake.

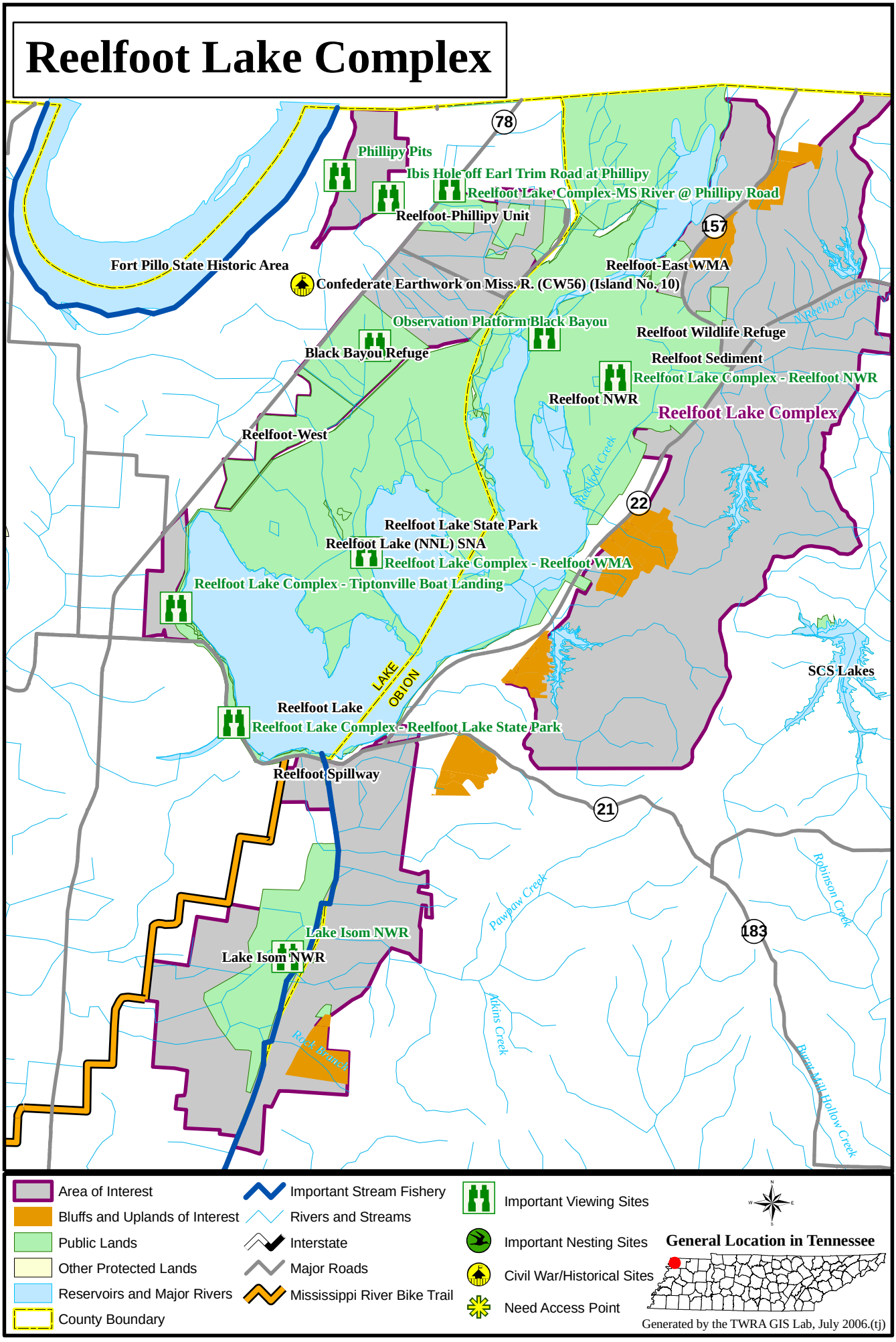
The Hill District to the east of Reelfoot is unique in many ways. It provides habitat for many species of wildlife that require forest cover. This is especially important since much of the floodplain has been cleared. It also provides a stark contrast to the alluvial valley below and it contains some of the best relief in northwest Tennessee. The hollows and ridges are similar in appearance to the Western Highland Rim and provide opportunities for hiking and camping in a rugged terrain that is the most diverse within the entire West Tennessee area. There are numerous sites along the edge of the Hill District to provide overlook opportunities.

Associated with this project are the significant areas to the west of New Markham known as the Phillipy Pitts/Ibis Hole. This is a key birding area and is one of the sites identified in Audubon's Great Birding Trail. Additionally, the land on the south end of this project is site of a Confederate Army "Cremaillere" line used in the defense of Island 10 during the Civil War. This unprotected site is one only of only a few remaining sites of its type in Tennessee.

Land Protection Needs – 19,820 acres at an estimated cost of $37,702,385.

Potential Partners – Due to its regional and national significance, several entities have already expressed an interest in this project. The USACE completed a Reconnaissance Report in 1994, and in 1999 completed a feasibility study for a Reelfoot Lake project under the authority of the Water Resources Development Act, which included features to replace the spillway, develop a sediment retention basin, enhance circulation channels, and develop additional waterfowl habitat. Due to opposition from landowners in Kentucky, this project has not been funded, but less controversial components may be funded in the future. The USFWS has previously identified both the Sediment Basin Unit and the Lake Isom Unit as priority activities for funding. DU, NWTF, TPGF, and TCF are potential partners as well.

Reelfoot Lake Complex



Area of Interest
Bluffs and Uplands of Interest
Public Lands
Other Protected Lands
Reservoirs and Major Rivers
County Boundary

Important Stream Fishery
Rivers and Streams
Interstate
Major Roads
Mississippi River Bike Trail

Important Viewing Sites
Important Nesting Sites
Civil War/Historical Sites
Need Access Point

General Location in Tennessee

Generated by the TWRA GIS Lab, July 2006.(tj)

SOUTH FORK OF THE FORKED DEER RIVER SYSTEM

Location – (N35.4674, W88.6080) The upper portion of the South Fork of the Forked River System area of interest starts near the Perry Switch Wetland east of Bemis near Hwy 45 in Madison County and traverses through Chester County down toward the town of Finger in McNairy County. This corridor is approximately 25 miles long and 2 miles wide at its widest point. This project area also includes Pinson Mounds State Park and Turk Creek.

Description - The area includes the typical bottomland hardwood/wetland type habitat found in western Tennessee with some agricultural lands found near the river proper. Lying within the upper portion of the South Fork of the Forked Deer River System, this area contains a number of major stream drainages including Huggins, Clarks, Horse, Bear, and Hunters Creeks. The elevation of this area is 400-500 above sea level. The soils of the Forked River System are alluvial and are somewhat silty and fertile.

The Forked Deer River System is the main drainage of the central portion of West Tennessee. Much of the Forked Deer basin was initially wetlands used by Native Americans and early settlers as hunting and fishing grounds. However much of this area has been drained and most Forked Deer tributaries have been channelized for agricultural purposes. In the mid 20th Century much of this was done under the auspices of the Obion-Forked Deer Basin Authority. Presently, environmental concerns have led to the cessation of channelization on a widespread basis. The federal government's "no net loss" policy regarding wetlands means that further channelization must be offset by creating new wetlands, called "mitigation lands", elsewhere.

Significance - The bottomland hardwoods/wetland areas found along the South Fork of the Forked Deer River System are some of the most biodiverse in the state having a species richness of over 160 species. This area has been indicated as an area of Biological Significance in many plans including the **"**West Tennessee Conservation Plan" and "Tennessee's Comprehensive Wildlife Conservation Strategy". This area supports good populations of game and fish species such as white-tailed deer, eastern wild turkey, waterfowl, largemouth bass, and crappie. This area also supports populations of non-game species that are in–need-of-management such as the Swainson's warbler, Mississippi kite, Chickasaw darter (recently separated out from the firebelly darter), barking treefrog, and alligator gar, state threatened species such as the lark sparrow, and state endangered species such as the Bewick's wren. Also, the Forked Deer River is the site of three ongoing species restoration projects (alligator gar, alligator snapping turtle, Mississippi kite).

Turk Creek (Site Importance High B1) in the town of Pinson supports a community of whorled sunflower (*Helianthus verticillatus*) between the Norfolk Southern railroad and Old Anderson Road. The plants are primarily located along wooded stream corridors, edges of agricultural fields, and along the Hwy. 45 right-of-way. The plants are numerous, probably numbering in the hundreds, and scattered across four tracts of land encompassing approximately 90 acres. Measures should be taken to work with the landowners to ensure protection of this population. The major threats include water

drainage, herbicide application, land conversion (construction), and road construction. *H. verticillatus* is a globally rare species with only three extant populations known in the world. Protection of the single Tennessee population is imperative to the overall conservation of *H. verticillatus*.

Pinson Mounds, one of two state archaeological parks, is a special park set aside to protect the prehistoric remains found there. Managed by the TDEC's Division of State Parks, the Pinson Mounds grouping consists of at least 17 earthen mounds, a geometric enclosure, habitation areas and related earthworks in an area that incorporates almost 1,200 acres. Pinson Mounds is a National Historic Landmark and is listed on the National Register of Historic Places.

It is believed that Pinson Mounds functioned as a ceremonial center and did not have a residential population. It contains more than 17 mounds with an earthen geometric enclosure. Radiocarbon dating indicates that the major mound building occurred about 50 B.C.E. to 380 C.E., and is considered to be of the Middle Woodland Period, although there are also features of the Mississippian Culture. It is the largest Middle Woodland Period mound complex in the southeast.

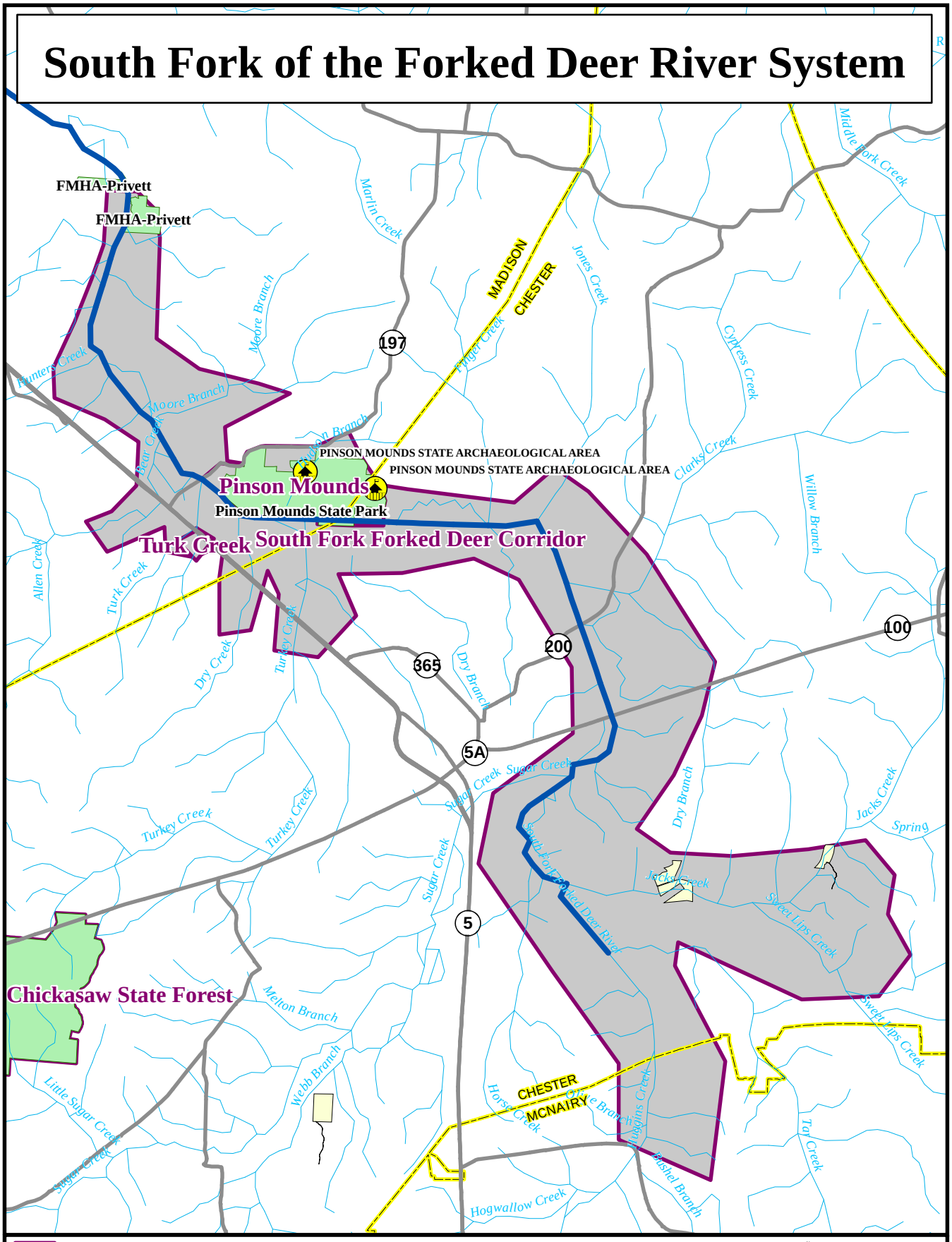
Placement of some of the mounds suggests that they were used to determine the solar equinox and solstice sunrise. From the largest mound, Saul's Mound, the sun may be observed rising at the spring and fall equinoxes over top of Mound 29. Saul's Mound is 72 feet tall with each corner pointing toward a cardinal direction.

Strategy - The strategy for future acquisition(s) within the upper portion of the South Fork of the Forked Deer River System is to acquire properties surrounding the Lower Forked Deer River System Habitat Corridor for access control, watershed protection, critical habitat protection, cultural and historic preservation of sensitive areas, habitat restoration (such as utilizing the old meanders within the river system for stream restoration), streambank stabilization, planting of bottomland hardwoods and native warm season grasses, and planting buffer strips along the river, species restoration (such as the alligator gar), and creation of a WMA with minimal lands management and excellent hunting/fishing opportunities.

Land Protection Needs – Turk Creek- 79 acres at an estimated cost of $158,000; Pinson Mounds - 200 acres at a cost of $400,000; TWRA - 16,000 acres at an estimated cost of $20,000,000.

Potential Partners – TWRA, USFWS, TDEC, TNC, QU, NRCS, University of Tennessee, TCF, LWCF, and NWTF.

South Fork of the Forked Deer River System



T.O. FULLER STATE PARK

Location – (N35.0620, W90.1140) T.O. Fuller State Park is located on Mitchell Road near the Mississippi River, just 11 miles south of downtown Memphis.

Description –. T.O Fuller is the only state park within the Memphis city limits. The park provides a combination of recreational opportunities with an 18 hole golf course, picnic areas, swimming pool and campground. The park contains 1138 acres.

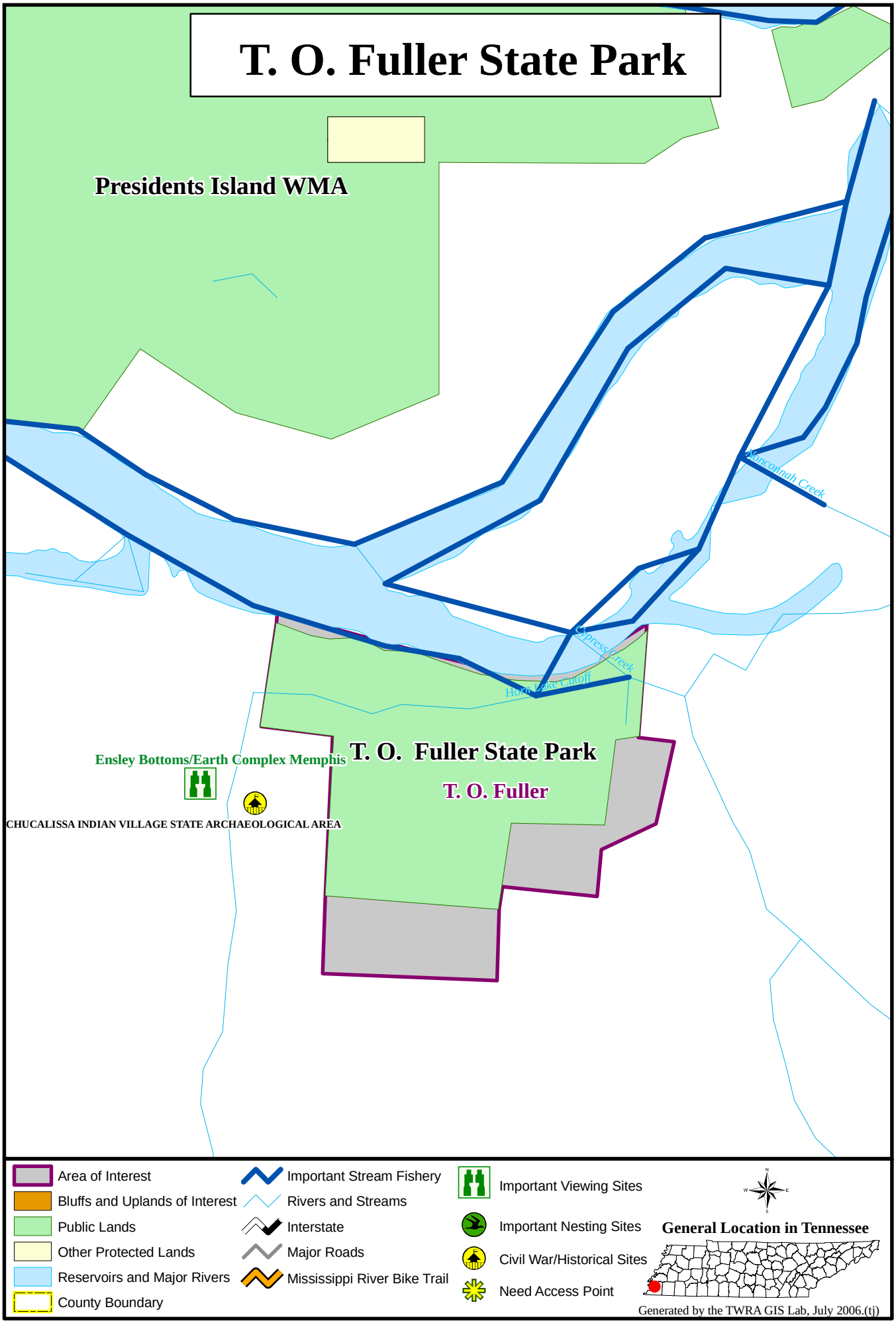
Significance - Few people ever stop to realize how much wildlife there truly is left in Memphis compared to many major cities across the United States. Amongst the shopping malls and drive-through burger dives, there lies what is left of Memphis' wild nature - T. O. Fuller State Park. The park was named for Dr. Thomas Oscar Fuller, an internationally recognized African American minister and educator.

Strategy - The strategy for future acquisitions at T.O. Fuller State Park is to acquire properties surrounding the park for access or access control and those that further the wildlife, aesthetics, and recreation missions of the State Park System.

Land Protection Needs - 369 acres at an estimated cost of $5,400,000.

Potential Partners - TCF, the LWCF**.**

T. O. Fuller State Park



UPPER OBION RIVER PROJECT

Location – (35.2616, W88.9960) The upper Obion River Project includes several subprojects along the upper Obion River and its three main stems (North, Middle and South Forks) located in Gibson, Obion, and Weakley Counties. These subprojects include the Bean Switch Refuge. Big Cypress Tree State Park, Gooch WMA, Hop-In Refuge, Maness Swamp Refuge, and Obion River WMA.

Significance – The Upper Obion River provides habitat for at least 22 species identified in Tennessee's State Wildlife Action Plan as species of greatest conservation need. These species include:

crawfish frog	Kentucky warbler
grasshopper sparrow	prothonotary warbler
Chuck-will's widow	dickcissel
cerulean warbler	Bell's vireo
little blue herron	hooded warbler
wood thrush	southeastern shrew
orchard oriole	meadow jumping mouse
least bittern	bald eagle
loggerhead shrike	American woodcock
Swainson's warbler	red-headed woodpecker

Bean Switch Refuge contains an old river oxbow that serves as permanent water for fisheries, wading birds, and important habitat for amphibians and reptiles. Most of the area is covered by scrub-shrub type vegetation. Swamp privet, willow, button bush, cypress, and water tupelo are located close to oxbows. Some wetland species of oaks are located on higher ground. Approximately 35 acres of open crop ground is located in the center of the refuge. Warm season grasses surround the crop ground**.** Approximately 710 acres are now protected.

A very high percentage of the land along the Middle Fork of the Obion River has been cleared and artificially drained for agricultural use. The Obion River and most tributaries have been channelized and the timber cleared. Bean Switch Refuge, even in a ponded swamp state, contains necessary habitat for a large diversity of both game and non-game wetland species.

It is a high priority to private properties within the refuge boundaries as well as properties around the refuge that are in the five-year floodplain.

Big Cypress Tree State Park lies in the floodplain of the Middle Fork of the Obion River. It consists of bottomland hardwood forests including species like bald cypress and tupelo, beaver and fox squirrel.

Big Cypress is a popular park with the Boy Scouts of America and usually hosts several scout camporees each year as well as individual troop camping trips. Boy Scout leaders

have used Big Cypress as a training site for new scout leaders, churches use the park and its picnic shelter for special services and cookouts, families host family reunions and area schools find the park popular for field trips.

The natural area is named for a champion bald cypress tree that was located on the area. The tree was once the largest and oldest bald cypress tree in the United States and the largest tree of any species east of the Mississippi River. However, a severe thunderstorm in July, 1976 produced a lightning bolt that struck the tree killing it.

The strategy for future acquisitions at Big Cypress Tree State Park are to acquire properties surrounding the park for access or access control and those that further the wildlife, aesthetics, and recreation missions of the State Park System.

Gooch WMA is located in the river floodplain and contains bottomland hardwoods, open agriculture fields, semi-permanent water (slough systems) and old river oxbows. This area was purchased by the Tennessee Game and Fish Commission from the C.M. Gooch family and declared a WMA in 1961. The original land purchase was approximately 6,658 acres. 1,000 acres of this tract was developed into a public waterfowl-hunting unit. The remaining acreage is managed for bottomland hardwoods. Additional land purchases were made in 1990 (Hopkins Tract- 372 acres, Town of Obion- 17 acres and Bank of Troy- 645 acres). Additional land was added as part of lands deeded to the State of Tennessee to mitigate losses of wetlands as a result of West Tennessee Tributaries Project. The land was purchased by the USACE with federal dollars to mitigate loss of wetlands due to channelization of the adjacent Obion River. The land purchase was completed in 1983.

Most all of the land along the Obion River has been cleared and artificially drained for agricultural use. Gooch WMA is one of the few areas where the bottomland timber remains. During high water the old river meanders still function and produce excellent habitat for a large diverse group of wetland species. However, due to river channelization and lack of drainage some areas of timber have died or the trees are under stress. Gooch WMA provides needed habitat for many different species of wading birds, mammals, amphibians, fish, waterfowl and reptiles.

Hop-In Refuge was a former bottomland hardwood system that was cleared and converted to agriculture by previous owners. The refuge is 660 acres in size and almost all of the acres are open agricultural fields.

The Hop-In Refuge property was part of land deeded to the State of Tennessee to mitigate losses of wetlands as a result of the West Tennessee Tributaries Project. The land was purchased by the USACE with federal dollars. The development money for the project came from a federal grant. The total cost of development for Hop-In Refuge was $62,500.00 dollars. The design and construction was by contract with DU. The area was declared a refuge in 1991.

This area now holds one of the largest populations of migrating waterfowl in the Obion River system. Hop-In Refuge is one of the few places left in the surrounding area that

waterfowl can go and not receive hunting pressure. Along with the waterfowl, the refuge attracts approximately 2000 sandhill cranes during migration, the most significant population in West Tennessee. bald eagles also visit the area on an annual basis.

It will be important to begin acquiring land north of the refuge. In 1995 the first sandhill cranes were seen on Hop-In Refuge. Since that time the population has grown from five birds to as many as 2200. The sandhill cranes roost on the refuge and move in the early morning to private property north of the refuge. This property, known as the McRight tract, is out of the annual floodplain and would be excellent for future development.

Maness Swamp Refuge was part of lands deeded to the State of Tennessee to mitigate losses of wetlands as a result of West Tennessee Tributaries Project. The land was purchased by the USACE.

Most all of the land along the South Fork of the Obion River has been cleared and artificially drained for agricultural use. Maness Swamp Refuge is one of the few areas where bottomland timber remains. During high water the old river meander still functions and produces excellent habitat for a large diverse group of wetland species.

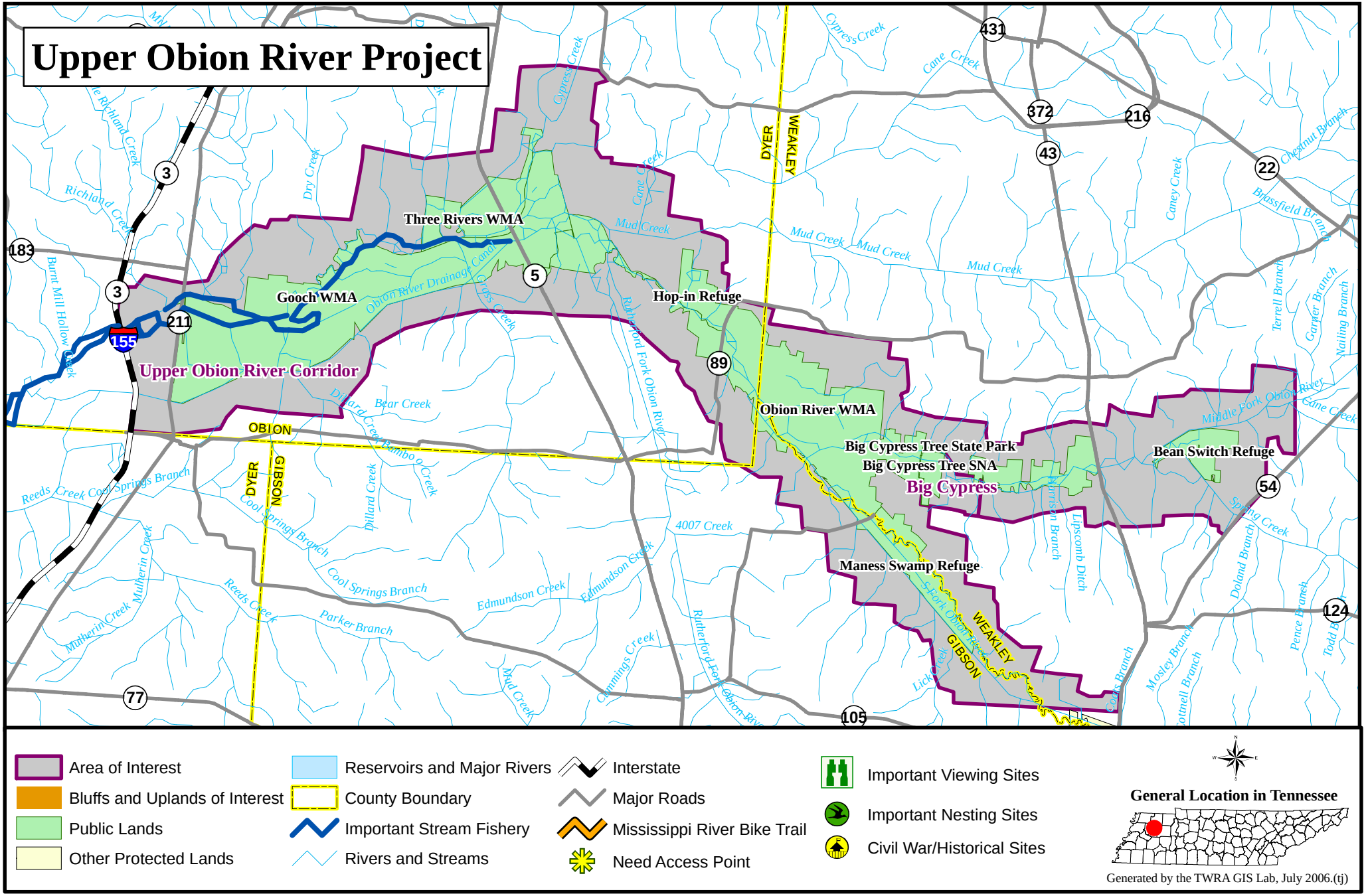
The most important property to acquire would be that along the river corridor. The property adjacent to the refuge and not cleared for agriculture should be first priority. This type of property would be the best habitat for a wide variety of species.

Obion River WMA is a 9,175 acre management area located in the river floodplain and contains bottomland hardwoods, open agriculture fields, semi-permanent water (slough systems) and old river oxbows. All of the area is subject to flooding, except the 600 acre Beech Ridge Unit and 150 acres of the Maness Swamp Hunting Unit. The WMA was part of lands deeded to the State of Tennessee to mitigate losses of wetlands as a result of West Tennessee Tributaries Project. The land was purchased by the USACE. The design for a portion of the WMA to be used for public waterfowl hunting was by contact with DU. Construction of the waterfowl unit and all other development was by TWRA. The area was declared a WMA in 1991.

The most important properties to acquire would include (in order or priority) the wetlands and forested lands adjacent to the management area, lands around Obion River WMA that will allow more public access, and property adjacent to the area within the five-year floodplain.

Land Protection Needs – Big Cypress Tree SNA - 250 acres at an estimated cost of $500,000; Refuges and WMA's – 18,800 acres at an estimated cost of $21,330,000

Potential Partners – TWRA, The Friends of Big Cypress Tree SNA, Wetland Acquisition Fund, DU, USACE (1135 Fund), NWTF, and QU**.**


Upper Obion River Project
Three Rivers WMA
Gooch WMA
Upper Obion River Corridor
Hop-in Refuge
Obion River WMA
Big Cypress Tree State Park
Big Cypress Tree SNA
Big Cypress
Bean Switch Refuge
Maness Swamp Refuge
DYER
WEAKLEY
GIBSON
OBION
Area of Interest
Bluffs and Uplands of Interest
Public Lands
Other Protected Lands
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Rivers and Streams
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Major Roads
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Need Access Point
Important Viewing Sites
Important Nesting Sites
Civil War/Historical Sites
General Location in Tennessee
Generated by the TWRA GIS Lab, July 2006.(tj)

WOLF RIVER CORRIDOR

Location – (N35.0429, W89.4095) The Wolf River begins in Holly Springs National Forest about one mile southwest of Hwy 72 and the Benton-Tippah County Mississippi line. The river flows north as it enters Tennessee then passes through Hardeman, Fayette and Shelby Counties along its 86 mile journey before emptying into the Mississippi River at Memphis. This project includes Wolf River WMA, Ghost River SNA, William B. Clark SNA, Riverwoods SNA, Lucius Burch Jr. SNA, and Shaws Creek Bottoms.

Description - The Wolf River carves a deep green passage through nearly 90 miles of forest, fields and communities in western Tennessee. Its watershed is 819 square miles, including 562 square miles in Tennessee and 257 square miles in Mississippi. The timbered areas of the floodplain consist primarily of oak-hickory species climax forest. Streams have cut relatively broad valleys with gently rolling uplands that end abruptly at the bluffs overlooking the Mississippi River floodplain. Meanders, sloughs, wetlands and bottomland hardwood forests characterize the river. The Wolf River is a significant component of the 24 million-acre Mississippi River Alluvial Plain Ecoregion, which covers seven states in the lower Mississippi River Valley.

Ghost River SNA is a 2,200-acre SNA, located within a larger 7,000 WMA. The natural area includes approximately 14 miles of the Wolf River beginning from the parking area near La Grange to Bateman Bridge. The Ghost River section of the Wolf River is an unchannelized river section that meanders through bottomland hardwood forests, cypress-tupelo swamps, and open marshes. The low ridges above the river bottoms support tulip poplar, beech, and white oak with northern red oak infrequently occurring. The Ghost River section of the Wolf River received its name from the loss of river current as the water "flows" through open marshes and bald cypress-water tupelo swamps. A canoe trail has been blazed through the disorienting maze of Virginia willow, cypress, tupelos, and stunted pumpkin ash. Trail development is on-going and includes a 600 ft. boardwalk in the Minnow Slough area.

The natural area also includes other ecologically significant uplands and sandy hills adjacent to the floodplain and mesic forests. Some of the most impressive trees that occur here are large oaks that include cherrybark, water willow, and swamp chestnut.

Ghost River SNA is managed cooperatively by TWRA and TDEC. The site conservation plan proposes the protection of 8,766 additional acres. Acquisition of properties adjacent to and the along the Wolf River, extending the Ghost River Natural Area, would provide an opportunity for greater protection of intact bottomland hardwood forest and increase habitat for numerous target conservation species. It would also provide protection for a unique sand hill plant community.

Shaws Creek Bottoms is approximately 1500 acres. Shaws Creek Bottoms surrounds the section of the Wolf River east of the Fayette/Shelby county line and is within the Wolf River Macrosite which contains the entire unchannelized river corridor from eastern Shelby County east through southwestern Tennessee. Although the river drainage in Shaws Creek is dotted with small towns and agricultural fields, it boasts significant

patches of mature bottomland hardwood forest (50+ years old). Other attributes include large tracts of younger forested bottomlands, cypress/tupelo marshes and wetlands, and upland woods. These and other ecologically significant areas were identified through TNC's Wolf River Resource Inventory project and guided Shaws Creek Bottoms' high prioritization for preliminary site design work in the Wolf River Macrosite.

William B. Clark Conservation Area SNA, near Rossville on Hwy 194 is a 460-acre owned by TNC. A variety of aquatic and terrestrial habitats offer opportunities for observing birds and other wildlife. An interpretive boardwalk exists on site and meanders through the bald cypress-water tupelo forest for about 1,600 feet. From the boardwalk, wildlife such as snakes (even cottonmouths), turtles, amphibians, beavers, wading birds, and aquatic vegetation are a common site. Cypress knees are seen eerily protruding from the moist forest floor and shallow water. The boardwalk provides access to rarely seen interior of a riparian bald cypress-water tupelo swamp, which have been quickly disappearing from West Tennessee.

This area is a B3 site. The natural area protects an unchannelized section of the Wolf River that includes meanders, sloughs, and bottomland hardwood forests. The river and its sloughs provide excellent habitat for rare and endangered freshwater mussels and other aquatic organisms. A variety of aquatic and terrestrial habitats offer opportunities for observing birds and other wildlife. Examples of unchannelized river and functional bottomland forests are becoming increasingly rare in west Tennessee.

Significance - The Wolf River includes meanders, sloughs, wetlands and bottomland hardwood forests. The river and its sloughs provide excellent habitat for rare and endangered freshwater mussels (25 species occur in the Wolf), over 100 species of fish, and other aquatic organisms. A variety of aquatic and terrestrial habitats offer opportunities for observing the more than 250 known bird species and other wildlife. There are 15 species of birds of the basin that are declining rapidly over wide areas. Bald cypress-water tupelo forests afford habitat for wildlife such as snakes, turtles, amphibians, beavers, wading birds, and aquatic vegetation. The riparian bald cypress-water tupelo swamp is quickly disappearing and examples of unchannelized river and functional bottomland forests are becoming increasingly rare in West Tennessee. State threatened or special concern state species include the copper iris, southern twayblade, cluster fescue, small-flowered beardtongue, southern hickorynut, southern rainbow, and fatmucket mussels, naked sand darter, and northern madtom.

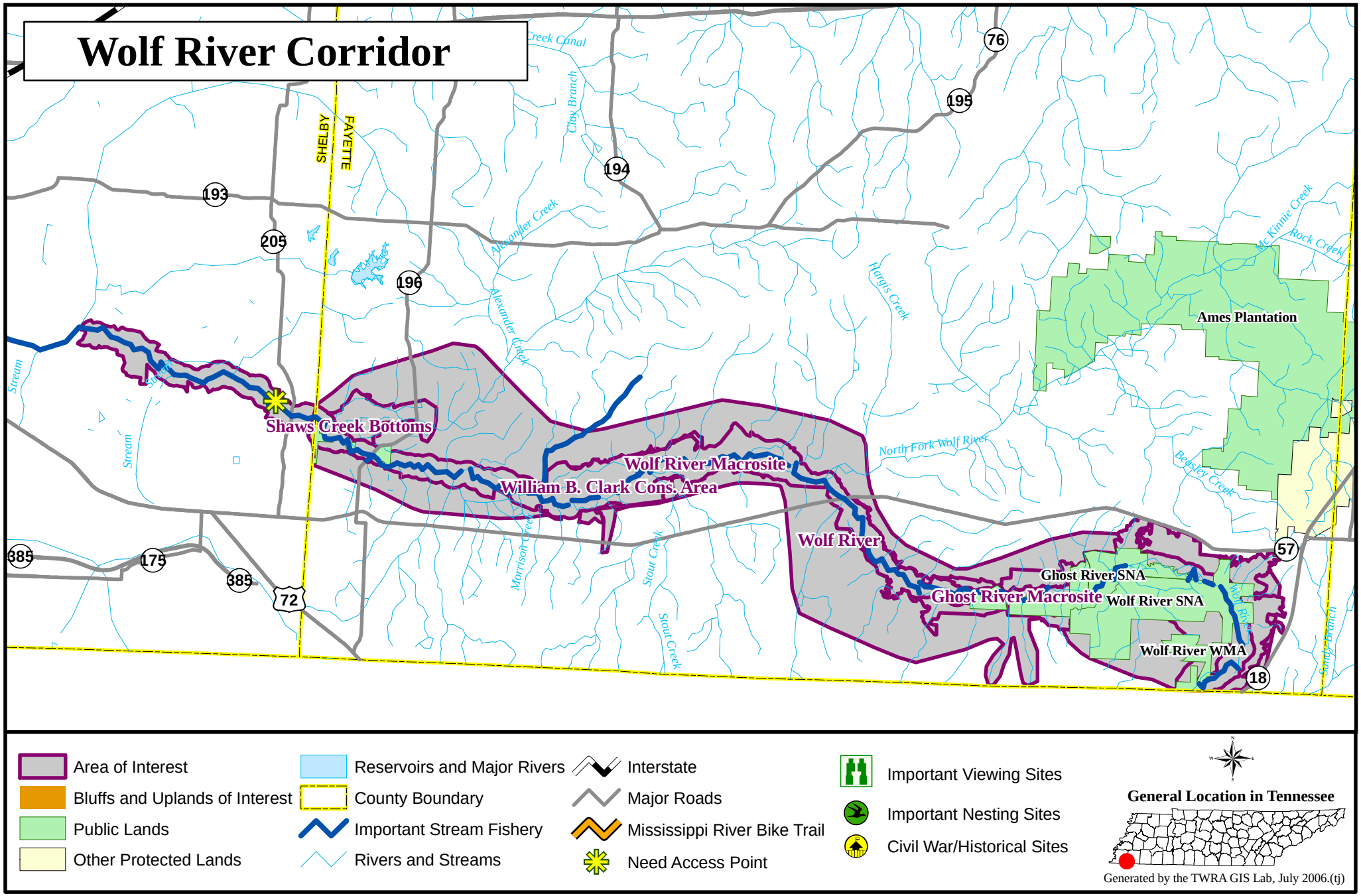
This river system is a critical component of the Memphis water supply. Protecting and restoring wetland functions and water quality along this system has tremendous implications to the welfare of citizenry and economy of the greater Memphis area.

Strategy - The Wolf River conservation plan identifies 42,000 acres in its 100-year floodplain. Already 17,000 acres are in some form of public ownership. Connecting contiguous protected areas to state owned lands along the river is a major approach to making the Wolf River a scenic greenway. Methods for conserving these areas are by fee title purchases, conservation easements, and conservation buyer identifications. Public

and private partnerships are key to protecting and maintaining this relatively unspoiled river.

Land Protection Needs – Ghost River SNA-8,766 acres at an estimated cost of $8,766,350; Shaws Creek – 1,673 acres at an estimated cost of $2,509,500; Wolf River WMA – 14,500 acres at an estimated cost of $28,500,000; William B. Clark SNA – 3,087 acres at an estimated cost of $3,087,000.

Potential Partners: TDEC, TWRA, CBA, TNC, USFWS, USACE, Shelby County Government, Fayette County Government, DU, and Wolf River Conservancy.


Wolf River Corridor
SHELBY
FAYETTE
Clay Branch
Alexander Creek
Hargis Creek
McKinnie Creek
Rock Creek
Ames Plantation
Shaws Creek Bottoms
Wolf River Macrosite
William B. Clark Cons. Area
North Fork Wolf River
Beasley Creek
Wolf River
Morrison Creek
Stout Creek
Ghost River SNA
Ghost River Macrosite
Wolf River SNA
Wolf River WMA
Sandy Branch
76
195
194
193
205
196
385
175
72
57
18
Area of Interest
Bluffs and Uplands of Interest
Public Lands
Other Protected Lands
Reservoirs and Major Rivers
County Boundary
Important Stream Fishery
Rivers and Streams
Interstate
Major Roads
Mississippi River Bike Trail
Need Access Point
Important Viewing Sites
Important Nesting Sites
Civil War/Historical Sites
General Location in Tennessee
Generated by the TWRA GIS Lab, July 2006.(tj)